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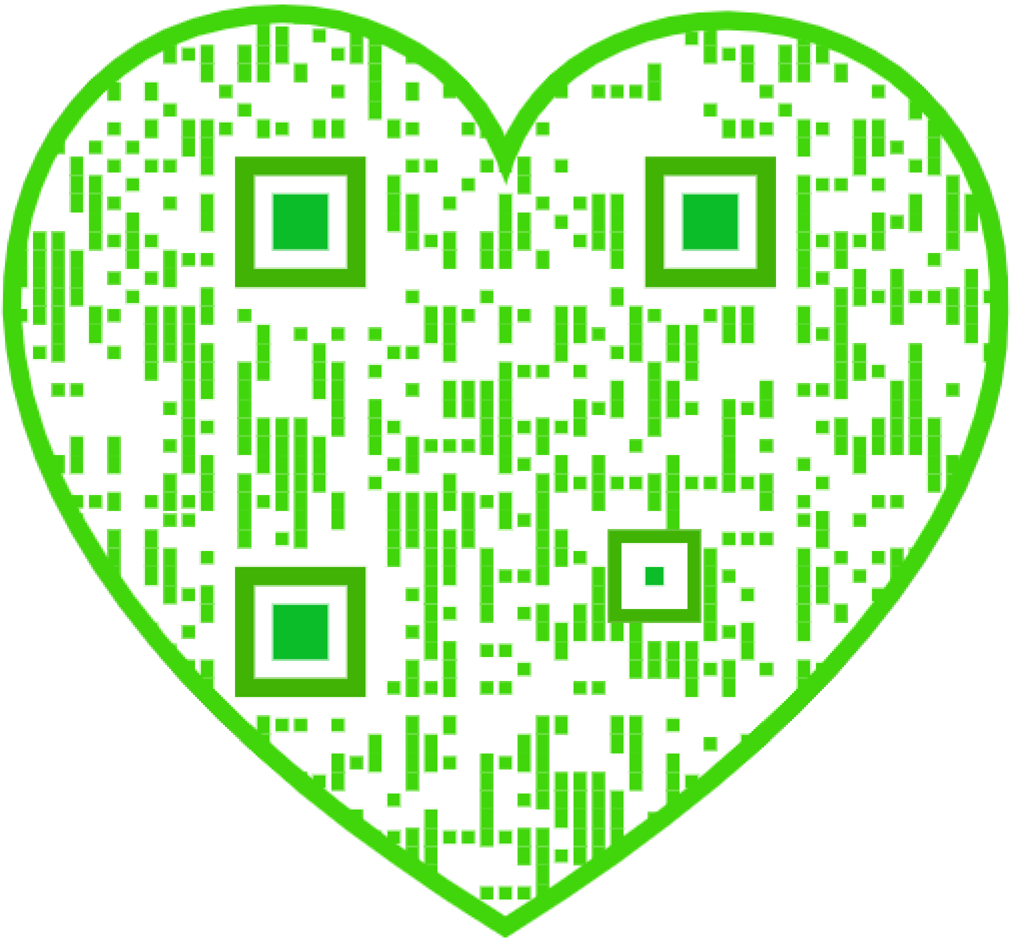


Backwoods Survival Guide®

PRACTICAL ADVICE FOR THE SIMPLE LIFE

CONTENTS

OUTDOORS

8 Cooking in the Wild
Learn how to make food in camp from some of the legends of the past.

14 Now Hiring
A fishing guide could be a huge asset to you and your group when you hit the water.

20 Wet Your Whistle
Processing water sourced in the wild and being able to carry it with you are critical.

HOMESTEADING

28 Grow Your Own
Mother Nature provides many wild medicinal plants—you just need to know how to use them.

34 Homestead Pork
Raising pigs can be a very rewarding addition to your self-reliance plan.

40 Homemade Marinades
These can make lesser cuts of meat taste great and excellent cuts of meat taste spectacular.

46 The Divine Carrot
No matter how many cartoons you've seen, this vegetable is good for more than just bunnies.

52 Oil Lamps 101
Use these old-fashioned illumination solutions during blackouts and more.

DIY PROJECTS

60 Out of Hibernation
Give your tents a good shakedown before you take them on camping trips.

66 Fix It Fast
Put together an arsenal of supplies and skills to keep your gear in proper working order.

72 Keep 'Em Sharp
A dull knife is far more dangerous to the user than a sharp one.

78 Staining on Purpose
Use natural solutions to dye fabrics and equipment.

GEAR AND EQUIPMENT

86 New Products
The latest and greatest from some of our favorite brands and companies.

90 Star Scars
This buyer's guide will help protect you from harmful UV rays all year long.

96 Tents for 2
Small shelters are sometimes the best way to go, and here are several worth further review.

102 Checking Out the Regulator
This camp knife from L.T. Wright is definitely a powerful asset when you're in the field.

108 Discovering KY Handcrafted
Bags, pouches, bowls and more, all handmade in the foothills of Appalachia.

For submission information or other editorial queries, please email Jim Cobb at jim@survivalweekly.com. We're always looking for new products to feature in our magazines.

Letter From the Editor

Welcome to Issue No. 32! I know I say this a lot, but we really do have some of the best writers working in the self-reliance niche today. They know their stuff inside and out. Not only that, but they're skilled in communicating that knowledge, breaking it down into easily digestible chunks.

Here are some of the topics we're covering this time around. Craig Caudill teaches us how to repair our gear in the field, while Reuben Bolieu covers knife maintenance. Mary SanGiovanni talks about using herbal remedies, and Alice Jones Webb shows us how to give our tents a good look over before hitting the trail.

We also have stories on fishing guides, raising pigs, growing carrots, using homemade marinades, filtering water and so much more. The goal is always to provide you with practical information that you can put to use in your life.

Welcome to the Backwoods!

JIM COBB

The advice given in this magazine is the opinion of the author of each article based on their personal experiences and knowledge. The right response to a disaster may not be the same in all situations. Articles are for informational purposes only. The publisher accepts no responsibility for injuries or liability arising from relying upon information contained herein. In the event of an emergency, follow the advice of first responders and trained professionals. Have a preparedness plan researched from multiple sources and avoid high-risk situations. Follow all applicable federal, state and local laws for firearm ownership, carry and usage.

CHAPTER 1

OUTDOORS

HEAD OUT THERE AND HAVE FUN EXPLORING ALL THAT MOTHER NATURE HAS TO OFFER.

COOKING IN THE WILD

Embrace the spirit of Nessmuk, Kephart and Beard

BY REUBEN BOLIEU

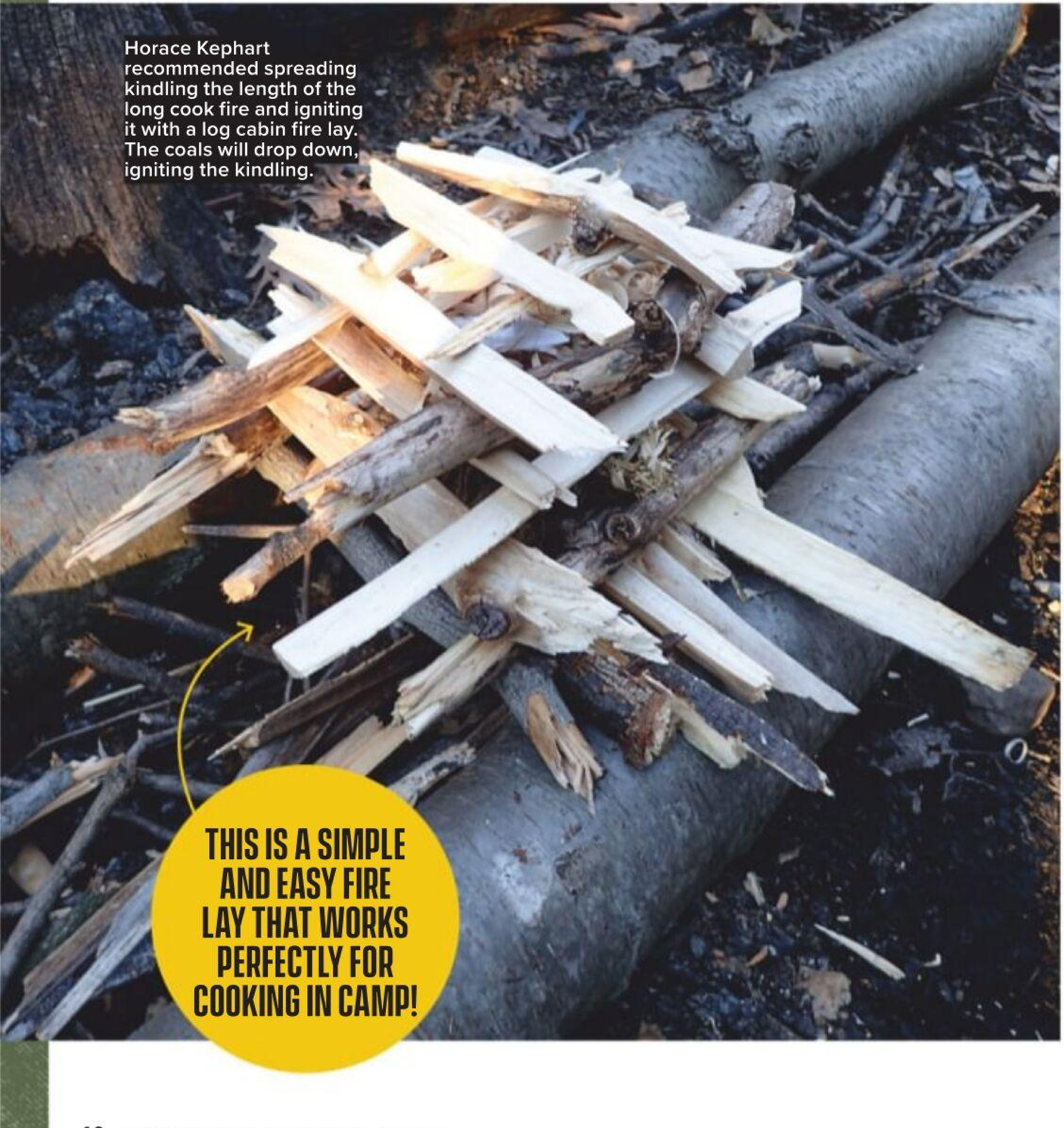
Crafting a camp table serves as a great way to stay organized while also ensuring that spatulas, tongs, pans, cutting boards and food remain off the ground.

> **'THERE IS NO USE TALKING ABOUT IT, THERE IS NO USE ARGUING ABOUT IT, THERE IS WITCHCRAFT IN THE SMELL OF THE OPEN FIRE, AND ALL THE MYSTERIES AND MAGIC OF THE ARABIAN NIGHTS DWELL IN THE ODOR OF FRYING BACON.' –DANIEL BEARD**

He's absolutely correct. There's something almost mystical in the power of food cooked over an open flame in the field. It doesn't just taste better, it fuels the spirit.

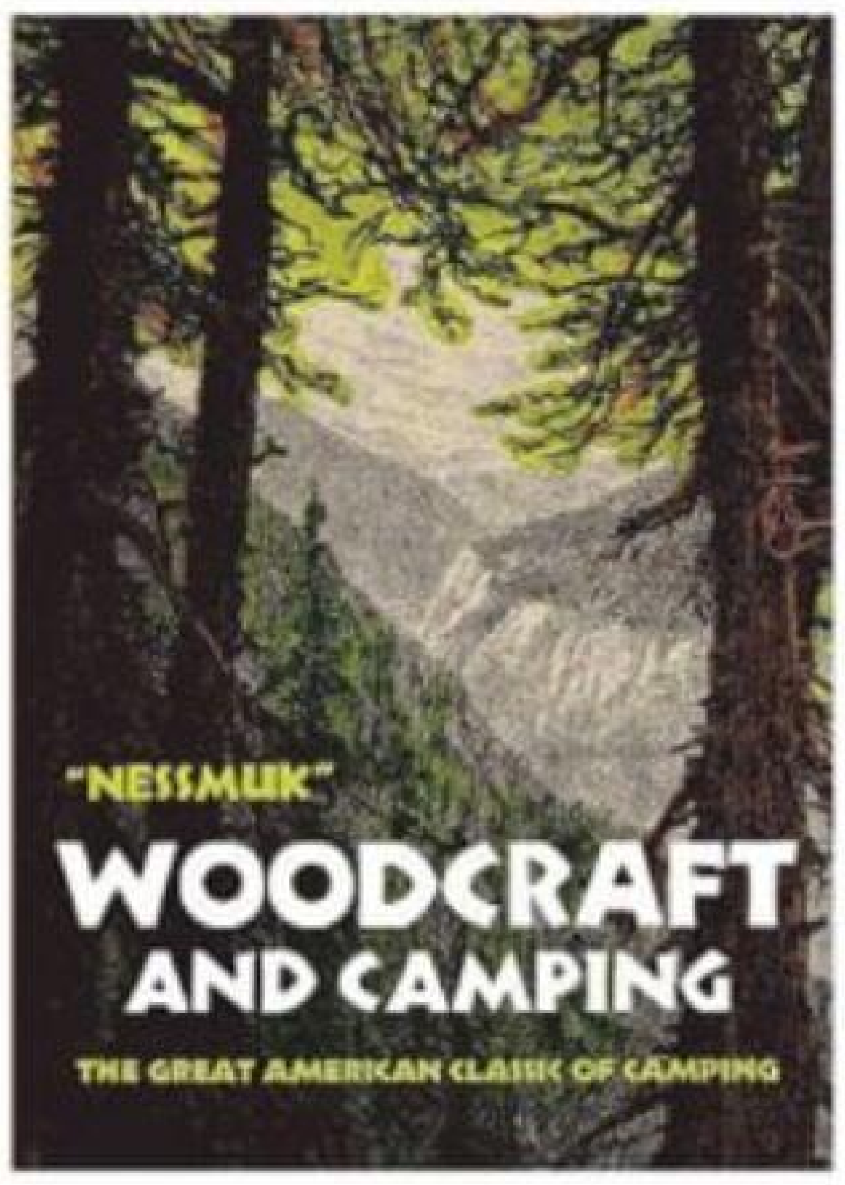
Three pioneers transformed outdoor cooking by recording and spreading their expertise through books, allowing more people to learn essential outdoor skills. Their techniques are still used and taught globally, preserving the tradition of camp cooking.

- **Daniel Carter Beard**, also known as "Uncle Dan," pioneered the American youth scouting movement. He founded the Sons of Daniel Boone, which later merged into the Boy Scouts of America. Beard authored several books on outdoor skills, and his methods are still taught in scouting programs worldwide.



Horace Kephart recommended spreading kindling the length of the long cook fire and igniting it with a log cabin fire lay. The coals will drop down, igniting the kindling.

THIS IS A SIMPLE AND EASY FIRE LAY THAT WORKS PERFECTLY FOR COOKING IN CAMP!

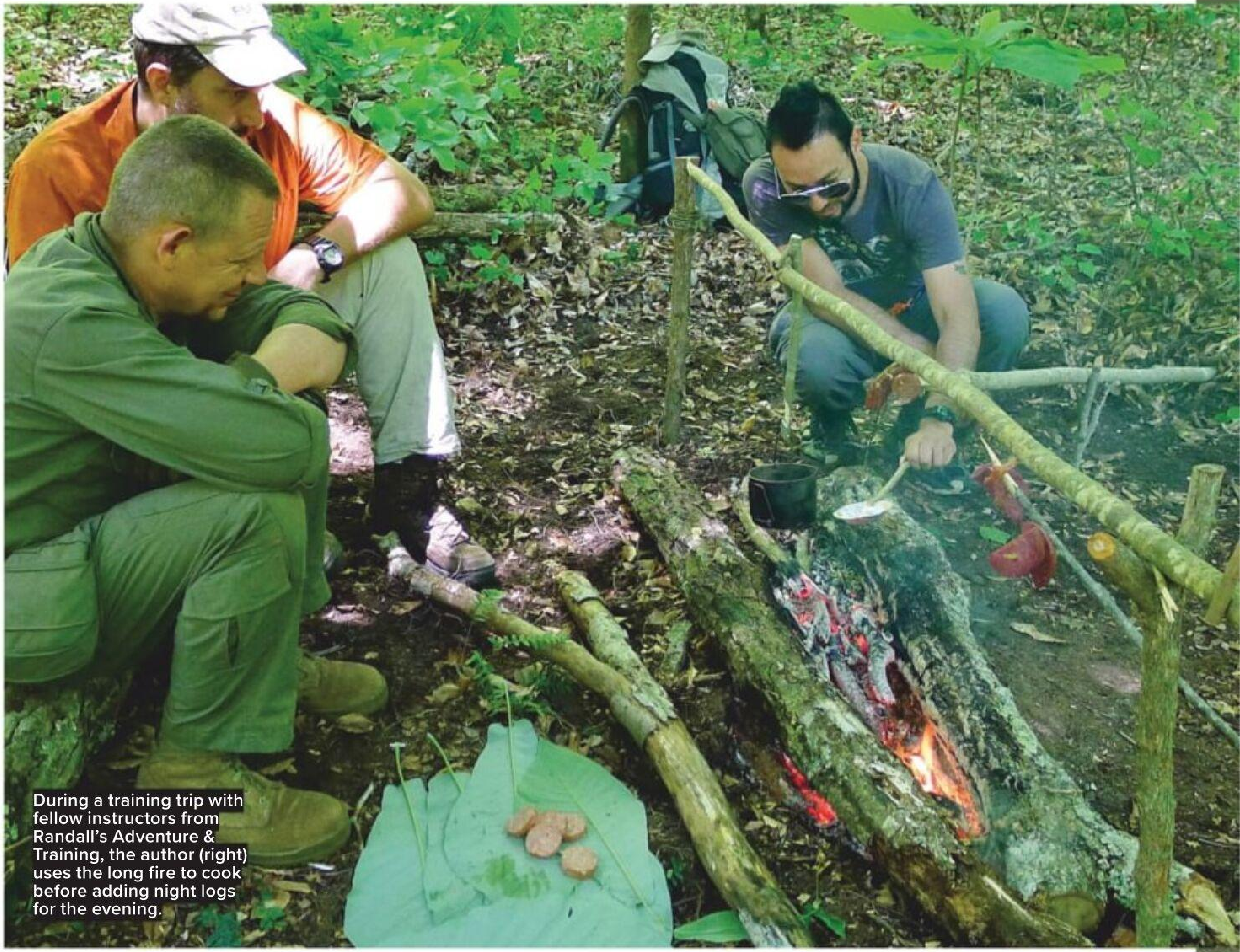


- **George Washington Sears, aka "Nessmuk,"** was an influential American outdoorsman and writer known for his expertise in lightweight camping and efficient campfire cooking. His book *Woodcraft and Camping* continues to influence modern bushcraft and survival training. His campfire cooking techniques and "Nessmuk cooking range" remain popular worldwide.

- **Horace Kephart** was an American author and outdoorsman known for his classic book *Camping and Woodcraft*, which includes comprehensive guidance on outdoor cooking. Kephart's practical advice on camp cooking is still valued by campers and survivalists across the globe.

NESSMUK COOKING RANGE

The Nessmuk cooking range is a simple yet effective method for campfire cooking. It was described by George Washington Sears, also



During a training trip with fellow instructors from Randall's Adventure & Training, the author (right) uses the long fire to cook before adding night logs for the evening.

known as Nessmuk, in his book *Woodcraft and Camping*. This cooking range is designed to be practical and efficient, making it ideal for lightweight camping and bushcraft.

Nessmuk considered this type of cooking setup to be a cooking range. Horace Kephart called it a hunter's fire. Kephart noted that this type of fire affords a cooking fire with proper supports for utensils and, afterward, an excellent long fire for the night.

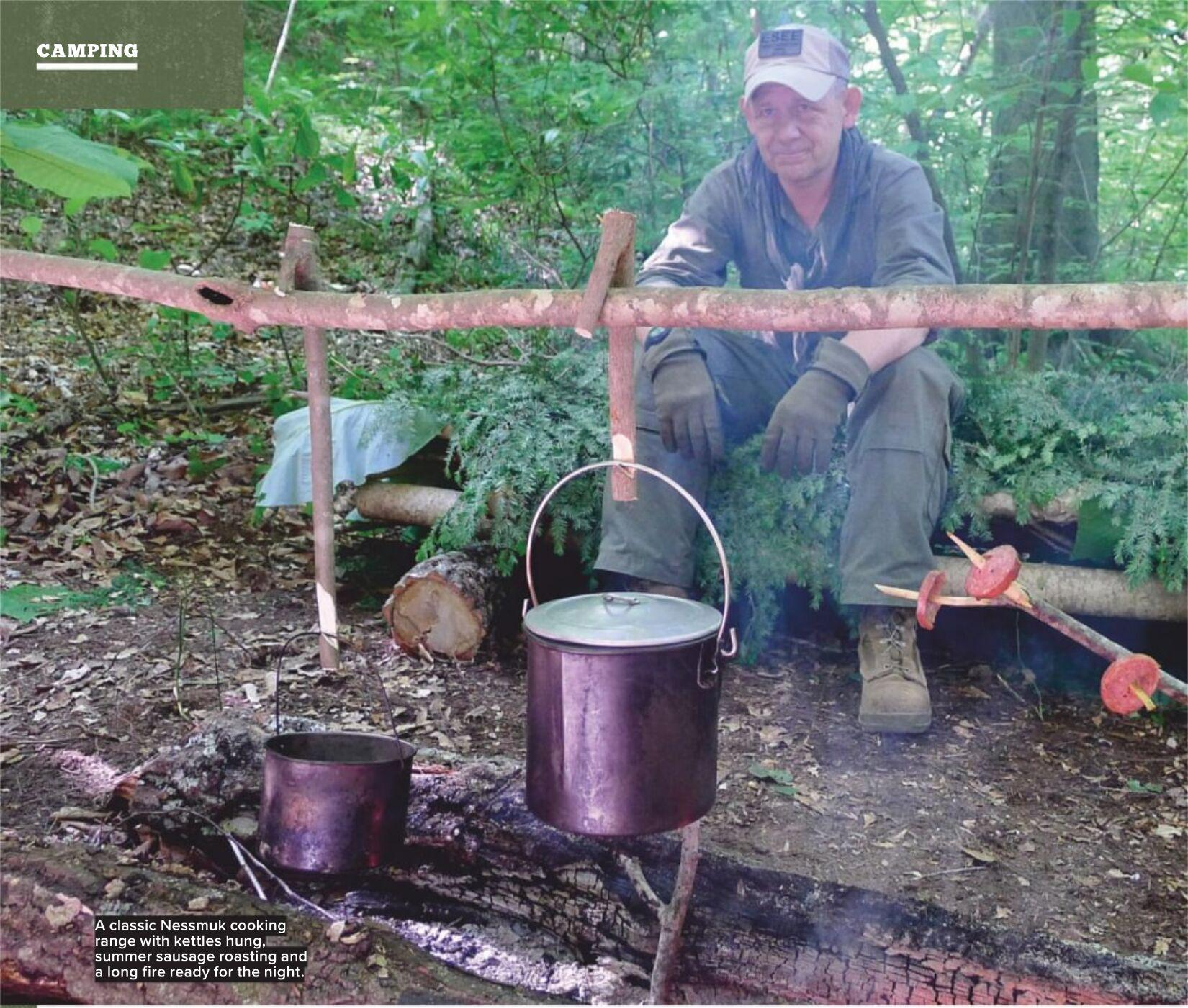
The range consists of two parallel logs, each about 8 inches in diameter and 4 feet long. These logs are placed on the ground with the ends closer together (about 4 inches apart) on one end, and the other ends slightly farther apart (about 7 inches). The tops of the logs are flattened to provide a stable surface for pots and pans.

The design allows even heat distribution, making cooking multiple items at once easier. The flat tops of the logs provide a stable surface for cooking utensils, reducing the risk of spills. By moving pots and pans along the length of the logs, you can control the cooking temperature, with the hotter area near the narrower end and a cooler area toward the wider end.

WAUGAN STICK

To create a support for a cooking range, start by finding a green sapling or branch about 6 feet long and the thickness of a wrist. Cut it in half so that you have a Y-shaped joint and a straight, flat top piece, each about 3 feet in length.

Next, sharpen the ends of the Y-shaped joint and the flat piece to a blunt point for hammering into the ground. Use the straight piece without the Y-joint to start the hole by hammering it into the ground. Once a decent hole is made, remove it and place the Y-joint in its place. Hammer the flat piece



A classic Nessmuk cooking range with kettles hung, summer sausage roasting and a long fire ready for the night.

into the ground at the other end of the logs.

Then, use a knife to lightly baton the flat top to create a small split that must be parallel to the Y-joint at the other end. Find a long, straight, green pole about the thickness of a broomstick to lay across the Y-joint and into the split. This green support pole is called a waugan stick if you're reading Beard, but Kephart readers will know it as a lug pole.

One end of the waugan stick rests in the crotch of the Y-joint, while the other end is carved to a flat-head screwdriver shape and wedged into the split. You can also add cordage lashing under the split to prevent further splitting down the length.

This method requires less work than finding another piece of green wood to procure a second Y-joint. Whatever you choose to call it—a hunter's fire or a cooking range—it isn't complete without pot hooks.

POT HOOKS

Many kettles, old and new, can be hung over a fire using a bail or a pot chain with S-hooks. Various woodcraft techniques, often involving knives and axes, can be used to suspend kettles over a fire. Pot hooks made from green wood are commonly used for this purpose. Beard's book *Camp-Lore and Woodcraft*, first published in 1920, is a great resource for learning more about these techniques.

The most common fixture for suspending cookware is the pot-claw. To make one, find a green, strong, flexible wood and cut a green stick with a natural fork or offshoot branch about 3 inches from the junction. Leave several inches of wood lengthwise to hang.

Invert the stick so that it hangs on the waugan stick. Carve a V-notch about 1 inch from the end of the stick by lightly making an X into the green wood with a knife. Carve out the top section down to create a bird's-beak shape for the pot bail to hang from.

The hake is a simple cooking tool. It begins with a V-shaped green branch, similar to a pot-claw, that needs to be trimmed just above the junction and then turned upside down to hang from a waugan stick. Instead of carving a V-notch to hold the kettle bail, a nail is hammered into the lower part of the stick about 1 inch from the end, at a 45-degree angle. This straightforward method is very effective for suspending cookware.

The most time-consuming and complex task is making the gib. Two green branches with a natural fork or offshoot branch must be sized up. Then, each flat end needs to be notched and split so that the two ends fit perfectly together, with the crotches facing away from each other. This will allow one end to hang on the waugan stick and the other end to hold the kettle. In the past, I've used a nail to join the two parts that have been notched and split, but I've also considered using an awl or nail to bore a hole through the green wood and then using a stick as a wooden wedge to hold the two pieces together.

The gallow-crook is a type of pot hanger that requires a very flexible wood, such as willow or witch hazel. Once again, trim a V-shaped branch just a few inches above the junction, but this time it will serve as the pot holder. The top of the green branch should be left long and have a thin taper. The technique involves bending the top portion of the green stick in a circle and interlocking it with itself. However, one downside of this fixture is that it cannot be easily removed without taking off or lifting the waugan stick.

The Nessmuk cooking range remains popular among outdoor enthusiasts and survivalists for its simplicity and effectiveness. It is still taught in survival courses worldwide.

TONGS

Wooden tongs are an absolute game changer in any outdoor kitchen. Not only are they super-sustainable, but they're also incredibly versatile. These handcrafted beauties can help you flip meat on the grill, rescue bacon from the coals, or even handle hot pots and pans over the fire. Plus, their wooden design means no more burnt fingers—they stay cool while you cook. And the best part? Each pair is totally unique, extra-durable and perfect for sparking conversations about sustainable camping. Trust me, you won't want to hit the great outdoors without these trusty tongs by your side.

Take your outdoor cooking to the next level with the Nessmuk cooking range. Use suspended pots and flat stones and make tongs for a genuinely rustic camp cooking adventure.

Reuben Bolieu is a passionate adventurer who explores remote and exotic places across the globe. He shares his expertise in survival techniques and woodcraft through his acclaimed writing, photography, and knowledge in survival classes and outdoor magazines.

IF YOU WANT TO LAND BIG FISH, IT HELPS TO HAVE SOMEONE THERE TO SHOW YOU HOW!

While there are no guarantees of success, a guide can not only show you where to find fish, but how to land them.

NOW HIRING

The care and feeding of guides

BY H. CLAY AALDERS

ARE YOU SOMEONE WHO HAS ALWAYS HAD FLY-FISHING AS AN UNCHECKED ITEM ON YOUR BUCKET LIST? ARE YOU A NOVICE FISHERMAN OR WEEKEND WARRIOR WHO WISHES TO PROGRESS UP THE LEARNING CURVE OR LEARN A NEW TECHNIQUE FASTER THAN YOUR OCCASIONAL TRIP TO THE STREAM WILL ALLOW?

Or are you an experienced fisherman visiting new waters, perhaps on a trip to a once-in-a-lifetime location? Then you should seriously consider hiring a guide on your next trip.

Before I start, by way of introduction, I was a fly-fishing guide for almost 20 years, beginning with wade trips for steelhead on the Lake Erie tributaries, followed by four years on the South Fork of the Snake River in Idaho building drift boats and guiding float trips. I founded my own guide service in the Great Smoky Mountains in Tennessee, which I ran for more than a decade. While I will be sharing my experiences as a trout fly-fishing guide, what I will be telling you applies largely to someone wanting to hire a bass boat guide on a lake, or even an offshore trolling trip.

WHY A GUIDE?

No matter where you are on the learning curve of fishing, it is unlikely that you have spent as much time on the body of water in question as one who is making a living on it. A good guide can help someone who has never cast a fly rod before end the day with a functional cast, learn a couple of knots, potentially catch a few fish, and save them hours of frustration from trial and error. What if you're doing everything correctly and the fish just aren't biting? Your guide will know to move to another spot, while you might waste hours and think you must be doing something wrong.

Veteran anglers can save themselves the same struggles on a new piece of water, especially if they only have a short time in the area. Or maybe there is a specific technique that you have read about but never actually tried. There are plenty of things that all of us can learn, and that includes guides picking up things from clients as well. Plus, who doesn't like to have someone else rowing the boat or carrying the gear? Retrieving flies hooked in trees—or even from their arm?

There are several advantages to working with a guide, beyond simply putting you onto fish. First and foremost is safety. Be honest: How many of you check on the location of the nearest ranger station or hospital before heading out on a day trip? Your guide knows, and knows the procedures to initiate rescue. You have a built-in "buddy" for the day, who is almost certainly CPR-certified and trained in

They can't promise you'll catch a trophy-worthy fish, but you'll definitely learn a thing or two and have fun doing it.

backcountry first aid. Accidents happen.

A guide will often have specialized gear that is tailored to the specific water on which you'll be fishing. This is especially true for saltwater or big-river fishing.

Another advantage is simply what will happen on a day with slow fishing. A good guide should have a repertoire of stories and anecdotes, local history, and nature facts to keep things lively and interesting.

CHOOSING A GUIDE

The first thing to do is your homework. We live in a golden age of information on both destinations and businesses. Read forums and fishing magazines for where you are planning on fishing, so you know the nature of the water, and can get a rough picture of what to expect.

If you've never gone fly-fishing before, a guide can help you determine the best flies to use.

FIVE DO'S OF SELECTING A GUIDE

1 Do your homework
Search forums and magazines about the nature of the fishing where you are headed and research potential guides. Ask lots of questions.

2 Do be honest with your guide
You can't fool your guide as to your skill or fitness once you are on the water, and trying to do so means you will have deprived them of the opportunity to set you up for the greatest possible success.

3 Do manage your expectations
Sometimes the fishing is slow, sometimes the water is high, sometimes it is 100 F. If you have done the two things above, as well as communicated openly, chances are you will have a positive experience, even with imperfect conditions.

4 Do tip your guide
Like Ginger Rogers, they are doing everything you are except backward and in heels, so to speak. This is doubly true if the guide is working for a service, where they are probably only being paid a fraction of the trip's cost. A lot of work goes into making the day a positive experience, including preparing gear, packing lunch and tying flies. A tip between $40 and $100 is typical.

5 Do have fun!
And don't bring a banana onto a guide's boat. You will be lucky if only the offending Cavendish is thrown overboard. But that is a story of superstition best asked of your guide.

Bring your kids along and you can all learn fly-fishing together.

Likewise, there are probably a dozen or more guide services plying any particular body of water, but at this point even an old-timer Luddite has either retired or built a website. Don't get sucked in only by "grip and grin" photos. The guide is naturally going to share images of his biggest fish. Look for other data, such as a guide's background biographical information, what is provided on the trip and what kinds of trips are available. Testimonials are great, but like big-fish photos, the guide is going to choose the best ones to post. Reviews from outside entities are better. Yelp wasn't a big thing when I stepped away, but Google reviews were.

Another thing to look for is company endorsements. I was independent, but I was an "Orvis Endorsed Fishing Guide." There are many companies who have "Pro Staff" or "Affiliated Guides." Often the guide pays for the privilege, as I did, but it is a two-way street. In the case of Orvis, they were managing the testimonial surveys as well as an annual training "rendezvous," and enough oversight that I would feel comfortable with any Orvis guide meeting a baseline of competence were I booking a trip. I can't attest to the specific vetting of programs other companies have, but if you don't know the guide you are choosing, there is at least someone to complain to, and a company that will likely follow up if there are a bunch of complaints. Nothing beats a word-of-mouth recommendation, so ask at your local fly/tackle shop as well.

BEST PRACTICES

The most important thing you can do as a client is be honest with your guide, both before and during the trip. If you don't, you are setting the whole experience up for failure. I did a lot of my guiding in the Global War on Terror era, and I worked with Project Healing Waters for wounded vets. A good guide can accommodate any manner of physical limitations, allergies or medical conditions if they know what to expect ahead of time.

Be honest about your skill and fitness level. You won't fool your guide once you hit the water. If, for example, you say you want to target trophy fish at the expense of potential numbers, but it turns out that you can't cast more than 20 feet and you can't crouch down, that's going to be a problem, but it might be just fine for a day with myriad smaller fish. Be honest during your trip. If you're tired, or something isn't working for you, say so. Don't let it spoil your day or risk an accident.

Let the guide know what you're looking for. Sure, you can trout-fish with spinning gear in Great Smoky Mountains National Park (no treble hooks), but I suck at it, and would never have charged someone as a guide. I would, however, refer them to an absolute artist at that craft.

You need to manage your expectations, whether it is the size of the average fish on a given body of water or the challenge or skills involved in catching them. There are a number of things that need to go right to end up with a fish in hand, and in some places, it is harder than others.

HIRING A GUIDE MEANS YOU'LL SPEND MORE TIME ACTUALLY FISHING RATHER THAN WORRYING ABOUT OTHER DETAILS OF THE TRIP.

There's a saying I learned at guide school (yes, that's a thing): "The only guarantee is lunch." A guide can't control the fish, their client or the weather. I used that saying as a philosophy for attempting to account for everything else from the condition of my gear to my homemade ginger-molasses cookies. Sometimes the fishing is just slow. Again, ask a lot of questions, from what is included (lunch, waders, loaner rods, all-inclusive) to what you need to do to prepare for the trip yourself.

If you've been honest, done some research and communication has been a two-way street with the guide, you will most likely have a good time.

Tight lines everyone.

H. Clay Aalders grew up in Cleveland, where he taught himself to fly-fish on his uncle's pond. He spent 19 years as a guide in Ohio, Pennsylvania, Idaho and Tennessee, retiring from guiding in 2018. Clay is now the digital editor of *Knife Magazine*, living in Knoxville, Tennessee, with his wife, Nicole, and two teenage children.

WET YOUR WHISTLE

Carrying and treating water

BY KEVIN ESTELA

Finding water is not always guaranteed, but if you do come across a source, you need to be able to make it safe to drink.

IN THE COURSES I TEACH, I MAKE SURE TO STRESS THE IMPORTANCE OF THE FOUR ACTIONS CRITICAL TO HYDRATION. YOU MUST FIND, COLLECT, TREAT AND CARRY WATER.

This succinct prioritization of needs boils down the requirements of hydration to four words one could memorize. However, attempting to simplify wilderness survival can often leave out important details. If you only know the four actions related to water, you may miss out on critical details along the way.

With this in mind, it makes sense to laser-focus on some of what is often left out of statements that are abbreviated for convenience but not depth of understanding. Instead of saying, “Carry a container,” you should ask, “What kind of container?” In addition to saying, “Treat water,” dive deeper and determine how quickly you can treat it, and how many gallons or liters. We must consume water for our survival, but what does that process look like from source to mouth? This is a in-depth look into some of the specifics of three commonly carried containers in a typical backpack.

CHOOSE A FILTER THAT WILL HANDLE EVERYTHING YOU NEED WHEN YOU HIT THE TRAIL!

TYPES OF WATER AND COLLECTION

If all water poured from a faucet, collection would be easy. Water can flow like a torrent but it can also pool, drip and be present as dampness. We can categorize water as fresh or salt, as well as treated or untreated. Water can be found in small or large quantities and it can be various levels of optimal, with clear, fast-moving, and sediment-free being close to the best.

When water is present in deep pools, we can easily submerge any container beneath the surface and fill it to capacity. Larger openings work better at filling up a container more rapidly than smaller mouths. When water glistens over a rock wall, the lip of the container mouth, large or small, won't work as effectively to collect it. This is where a rag or a piece of paracord can be used to sponge it or drip it into a bottle. Some water is a combination of clear and murky with the bottom depths containing the most sediment. Particulates can wreak havoc on water filters and the optimal method for collecting water in this situation is through a cloth acting as a strainer. The overarching lesson to learn when classifying water is recognizing that the water you want is not necessarily the water you will need or be able to collect.

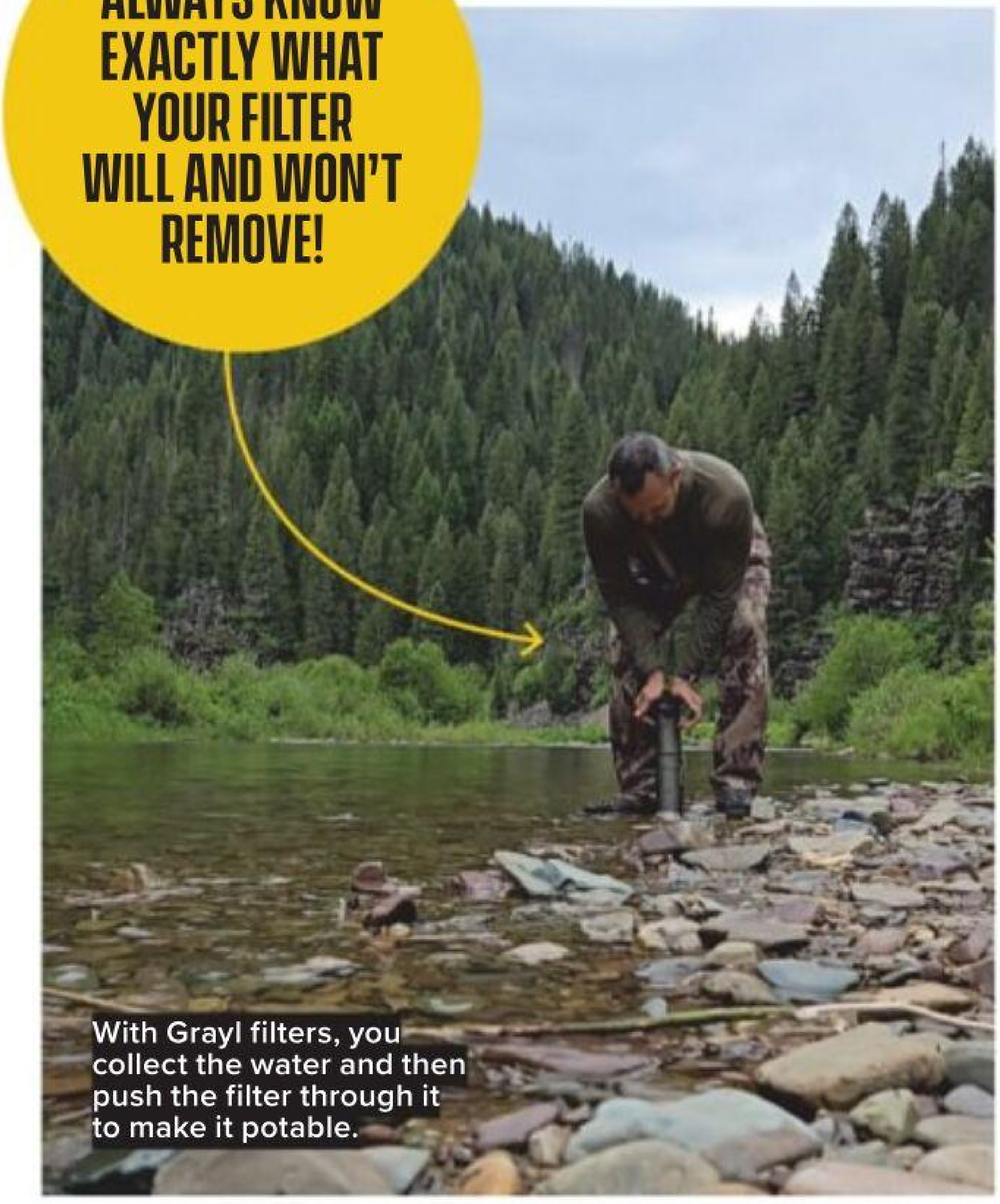
CONTAINERS

Let's look at three specific water containers I've used extensively.

✖ **750 ml Toaks Titanium Billy Pot** Just large enough to fit snugly around a standard 32-ounce water bottle, the Toaks 750 ml bailed titanium pot is the right size for a solo adventure. The folding bail allows the user to keep the pot out of the ashes and suspended over a fire when using it to boil water. While ideal for treating water, balance is the determining factor on how far water can be carried in it. The bail makes it easier to carry the pot compared to a standard backpacking pot or mug with side-mounted wire handles. Without a screw-top lid, most billy pots are meant for short-term or short-distance carrying. This pot comes with a lid that doesn't lock in place, but it does serve to boil water faster by

The Toaks 750 ml bailed pot boiling water directly over a fire on a recent trip to Colorado.

Compact and light, the Toaks 750 ml is large enough to boil staple foods like boil-in-bag rice, too.



ALWAYS KNOW EXACTLY WHAT YOUR FILTER WILL AND WON'T REMOVE!

With Grayl filters, you collect the water and then push the filter through it to make it potable.

Grayl products give you a filter and water transport container in one.

preventing heat from escaping. In addition, this container weighs significantly less (3.9 ounces) than a stainless steel mug of equal size, making it ideal for saving on weight.

✖ **Grayl UltraPress Ti**
The Grayl has taken the survival community by storm. It has become a popular water treatment device for backpackers, world travelers and elite units in the military. Used in a manner much like a French press, the Grayl has an average treatment time of 10 to 15 seconds with a new filter. On a recent trip to Colorado, the Grayl was used as a primary means of treating water and transferring it to other water containers. This brought up the

SPONGE AND SQUEEZE

While we all have an idea of finding a perfect deep pool we can submerge our bottles in, we may only find a wet rock in the wilderness. In situations like this, a sponge-and-squeeze collection method is the best option. For that reason, testing the sponging effects of a triangular bandage, a neck gaiter from Kryptek and a standard kitchen sponge is in order. In particular, the focus of the test is to see how much water is transferred with each squeeze. Performed in the comfort of the home kitchen, each item was submerged in a bowl of water and squeezed. Water was allowed to soak into the sponge. The item was removed, held over the bowl for three seconds, and then squeezed into a small measuring bottle. The amount of water collected was measured and the total number of squeezes necessary to fill a 16-ounce bottle recorded. This controlled test was conducted to determine the viability of using a sponge-and-squeeze method to fill a bottle in suboptimal conditions. The results of the test proved all three could be used, but the kitchen sponge reigned supreme as the most effective. While you don't want to collect water this way, know you can.

COLLECTION OPTION	Dry Weight	One Squeeze	Total Squeezes to fill 16 oz Bottle
Standard Kitchen Sponge	0.67 ounce	60 ml	8
Kryptek Neck Gaiter	1.16 ounces	45 ml	10.5
Triangular Bandage	1.87 ounces	40 ml	12

question of fatigue factor. To test the amount of force needed to use the Grayl, the unit was placed on a bathroom scale and pressed. Upwards of 60 pounds of pressure was needed to complete the treatment cycle on one unit, but the force needed could vary with different water quality, temperatures and the age of the filter unit.

The Grayl may be the most impressive device on the market and during the evaluation, testers of all sizes and ages were able to use it easily with locked straight arms and body weight.

✖ **32-ounce Nalgene Water Bottle** The ubiquitous Nalgene bottle can be found everywhere and for good reason. They are tough. Years ago, these bottles were targeted as a threat for leaching bisphenol A, which disrupts the endocrine system. Since 2008, Nalgene phased out the BPA plastics and the company has grown to include bottles of numerous sizes, colors and custom options. The wide-mouth variety fills the easiest, but the flip side of the coin is that it empties quickly. Ideally, it doesn't empty all over you. The narrow mouth is easier to drink out of but approximately half as quick to fill, which isn't necessarily a deal breaker. In an extreme emergency, you could boil water in a plastic bottle, but it will destroy its form and likely introduce chemicals into your body. In an emergency, dehydration will kill you before the chemicals, do though.

nalgene
MADE IN USA

The Toaks pot and Nalgene bottle nest perfectly to save space.

The Grayl UltraPress Ti has a titanium sleeve and holds 16.9 ounces of water.

WATER TREATMENT

Water should be considered either treated or untreated. In the backcountry, your water treatment plan should follow PACE (primary, alternate, contingency, emergency) planning. With these three containers and supplements, one could filter with the Grayl first, and boil with the Toaks second, treat with Aquamira drops third. An emergency water treatment method could include a small zip-lock bag and individually wrapped Aquatab tablets. Furthermore, an ultraviolet method like a Steri-Pen could be used with these containers as an additional method. Just keep in mind that light-based water treatment methods require battery power and batteries lose strength with use and in the cold. Redundancy is often the result of carrying too much weight into the backcountry, but with the Grayl Ti bottle, the unit can be used to filter, to boil in the titanium collection cup, or treat water with pills inside the vessel with the one-way valve.

CARRYING CAPABILITY

The best place to carry water is inside your body. It is better to be hydrated with an empty water bottle in hand than it is to feel the effects of dehydration while carrying a partially filled bottle. In certain environments, it is best to prioritize hydration over mobility and tank up as you rest in the shade. However, we don't always have the luxury of time and sitting around sipping water to slowly absorb it. In the process of procuring water, after we find, collect and treat it, we must have a way to carry it. The sum total volume of these three containers is 74.2 ounces (Toaks: 25.3; Grayl: 16.9; Nalgene: 32 ounces). To carry more, a repurposed 2-liter (67.6-ounce) soda bottle or collapsible water bottle could be carried and filled on-site.

It's easy to say "hydrate" or "carry water." It isn't always easy to explain what that means. It matters more to ask how you will hydrate. Doing a deep dive into the "how" will help you identify the weak points in your planning. Far from the comfort of your home and the seemingly unlimited supplies you have in your garage or shed, the kit you carry into the woods needs to be foolproof. At the very least, track the status of the gear you carry and replace what is outdated, worn or in disrepair. Looking at the often-taken-for-granted items you carry with a more critical eye will keep you safer than just knowing something holds water.

The author's layout for testing the absorption capability of various materials.

IT'S ALWAYS A GOOD IDEA TO TEST YOUR EQUIPMENT BEFORE YOU NEED IT FOR REAL!

Kevin Estela is the bestselling author of *101 Skills You Need to Survive in the Woods*. He has been an outdoor educator for over two decades, teaching bushcraft, survival and firearms courses across the country. Estela is the founder of the Estela Wilderness Education Fund. He is a lifelong avid outdoorsman with interests in hunting, fishing, camping and canoeing/kayaking. He is currently working with multiple companies to educate, equip and empower others.

CHAPTER 2

HOMESTEADING

SELF-RELIANCE CAN BE A LOT OF WORK, BUT THE REWARDS MAKE IT WORTH ALL OF THE EFFORT.

ALWAYS MAKE SURE YOU POSITIVELY IDENTIFY ANY PLANT BEFORE USING IT!

Mother Nature provides plants that can be used to treat an enormous range of ailments.

GROW YOUR OWN

Healing plants to keep on hand

BY MARY SANGIOVANNI

IT'S EARLY SUMMER—HOT DAYS AND BREEZY NIGHTS, BLOOMING FLOWERS, TREES, AND PLANTS RECLAIMING THE EARTH. IF EVER THERE WAS A TIME OF YEAR TO REMIND US HOW MUCH A PART OF THE NATURAL WORLD WE ARE, IT'S NOW.

And we are a part of that world. For centuries, people have known that if we take care of the flowers and plants around us, they'll take care of us. There are numerous herbs and even flowers that can prevent illness and help heal injuries. We can have the benefit of those home remedies as close to us as the garden outside our kitchen door—or even on our kitchen windowsill itself.

The following is a list of herbs and flowers I consider to be indispensable parts of my garden every year. These treat or prevent a range of maladies from head to toe, simple discomforts and more serious illnesses that require expensive medicine to prevent or treat. Many even show promise in preventing and inhibiting cancer.

As always, use caution when wildcrafting, and research whether any herbs or flowers will interact with medications or medical conditions you may have.

DANDELION

Unfortunately, dandelions have traditionally been looked at as an invasive weed, when in actuality, everything from the roots to stems to flowers can be beneficial for our health. I have put them in soups, sauteed them with chicken and sprinkled them on salads. They provide an antioxidant that protects cells from damage, helps lower blood sugar, blood pressure, and cholesterol, helps manage weight, and can also soothe a variety of skin ailments.

Dandelion roots, stems, leaves and even flowers can be steeped to make tea (known as an infusion), and can be cooked with things like butter, which cut the bitterness, to make a vegetable side dish or a part of the main course. The flowers can be used in conjunction with honey mixed with melted beeswax to make a soothing skin salve.

While many think of it as just a weed, the dandelion is a great antioxidant and can help lower blood pressure, among many other things.

ECHINACEA

This pretty purple flower looks nice, and can also be used to help treat or prevent colds, flu and other infections, as well as promote the healing of wounds. In my experience, they are a little tougher to grow from seed, but worth the effort. They are particularly effective with upper respiratory infections, along with eucalyptus. Most often, the leaves, stalks and roots are ground up and used to make teas. The flowers can be eaten as well, generally added to salads. If you want to add more echinacea to your little ones' diet, you might try dicing up the flowers and mixing them in with cookie batter to make flower cookies (this can also be done with lavender).

CHAMOMILE

Whether brewed as a tea, applied as a compress or used topically to treat skin irritation, chamomile can promote relaxation and relief from anxiety and depression. It has antimicrobial and anti-inflammatory properties, as well. It has shown to be a very versatile herb, both internally and externally, although one should be careful if one has an allergy to ragweed, as these plants are in the same family. I have used the pretty little white-and-yellow flowers, both fresh and dried, to make teas to calm my nerves or help me relax before going to sleep. Often, I mix chamomile with lavender and even jasmine for these teas.

Echinacea looks pretty and can be used to treat colds and flu symptoms.

PLANT THESE NATURAL REMEDIES AROUND YOUR YARD AND MAKE USE OF THEM AS NEEDED!

PEPPERMINT

Chewing the leaves of the peppermint plant or brewing them into a tea have shown to be effective ways to treat nausea, indigestion, gas and other digestive issues, as well as alleviating headaches and menstrual pain. The leaves can be used fresh or dried. I have found that if children have upset tummies, they find the mild, slightly candy-cane-like taste enjoyable, and will drink a slightly cooled tea or even chew the leaves right off the plant for the novelty of it.

Peppermint oil, made from distilling the plant's leaves, is also used to treat skin irritations, but any essential oil applied topically should always be diluted with a carrier, like olive oil or coconut oil.

Some studies suggest that peppermint oil may even help alleviate the side effects of chemotherapy, as it serves as a natural means of combating fatigue and nausea.

OREGANO

Part of the mint family, oregano isn't just good on pizza—it also has antiseptic, antioxidant, anti-inflammatory and antibiotic properties. Oregano is pretty hardy and it's an easy herb to grow. Like many herbs used as garnishes or sprinkled on food, oregano was a traditional way to help prevent foodborne illness.

As with peppermint, oregano essential oil is where you will find the particularly concentrated health benefits. However, dried, crushed oregano leaves can be used in cooking, of course, to make use of their culinary and medicinal properties.

VALERIAN

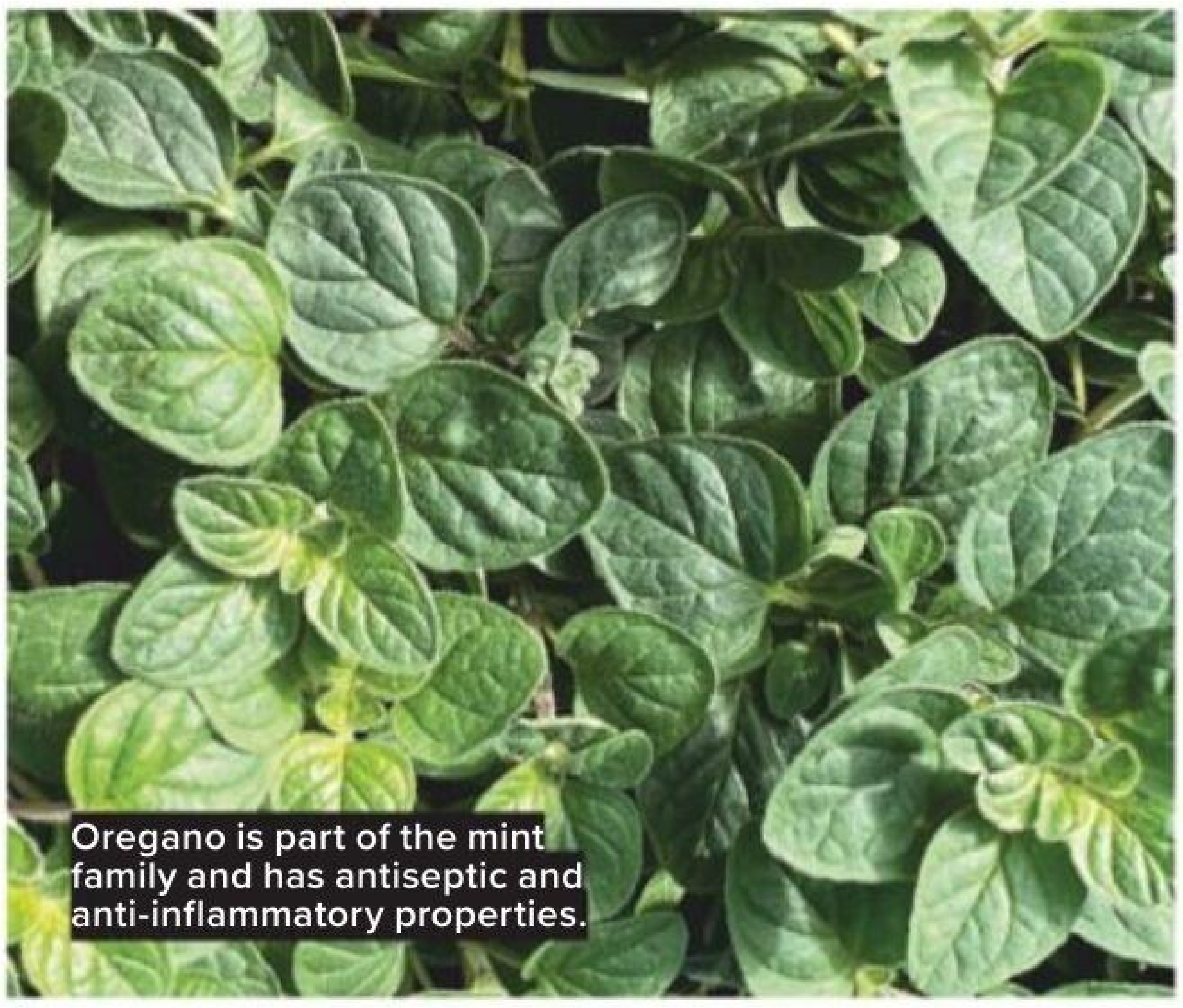
These plants produce a pretty white flower, but

Chamomile works well for skin irritations, but if you're allergic to ragweed, it should be avoided.

it is the root which is dried and powdered to make teas and capsules. It has historically been used to treat everything from tremors to shell shock, but nowadays, valerian is primarily used to treat insomnia and anxiety, having a calming effect on the system. It is also used to promote sleep and treat menstrual cramps and menopause symptoms.

Other plants you may want to consider adding to your garden, but which may be too big or unwieldy for a windowsill, are ashwagandha, turmeric, ginger and garlic. These are powerful plants from which herbal medicines can be derived, and which are considered essential sources of medicine all over the world. With the exception of garlic, which is used in cooking and in essential oil form, the roots of these plants provide a host of medicinal benefits which we can use to improve life.

There are many easy-to-grow, easy-to-access plants that can be used to improve our quality of life, help maintain balance and well-being, and strengthen our natural immunities and ability to fight illness and stay healthy. Herbal medicine can be a useful way to take some control of our health, reduce the cost of medicines and doctor visits, and protect those we love.


Oregano is part of the mint family and has antiseptic and anti-inflammatory properties.

Valerian's root is dried and powdered to make capsules and teas.

Mary SanGiovanni is the author of over 20 books, as well as short stories, comics and articles. She has an avid interest in herbology and herbal medicine.

Learn how to make infusions and similar concoctions.

ESSENTIAL OILS

Creating your own essential oils requires a multistep process using a still. While there are a number of ways to extract the beneficial properties of herbs, either through alcohol like gin, oils like olive or coconut oil, or pressing leaves, distilling them seems to be the best way to get the most concentrated elements of a plant. A fairly simple beginner's guide to distilling herbs for their essential oils can be found here: diydistilling.com/how-to-make-essential-oils-complete-guide/

HOMESTEAD PORK

More than just bacon

BY ANDREA KOPUT

THEY CAN BE CUTE AND THEY'RE DEFINITELY SMART, BUT THEY ALSO TASTE GREAT!

Raising pigs on your homestead is one of the best farm-to-plate ways to teach and feed your family. The lessons learned will last a lifetime.

LONG AGO, IN A FARAWAY LAND, THERE LIVED THREE LITTLE PIGS. THIS FABLE ECHOES IN OUR SUBCONSCIOUS, THE WEARS AND WOES OF TAKING THE FAST AND EASY ROUTE VERSUS TAKING ONE'S TIME AND DOING DUE DILIGENCE. SIMILAR LESSONS RING TRUE WITH RAISING PORK ON THE HOMESTEAD.

There are three distinct choices when raising hogs, the quick and fast with a six-month turnaround, the modest effort reaching weight in 10 months, and the long-term investment that becomes bacon in just under two years. The choice you make is up to you, and that choice is best made when you understand pig breed specifications and personality quirks.

CAN'T I BUY BACON?

Why should I take the time, effort and expense to raise pigs on my own property? When the choice is made to raise hogs on the homestead, a conscious effort is created in building a better life and thereby producing a better product that

Many find there is no going back and when you start raising homestead hogs. They become a fundamental cornerstone of sustainability.

you can clearly taste. Homestead pork of all breeds has a flavor profile you will remember and is closer in color and taste to veal than the pale, anemic pork chops you will buy at the store.

Once you start eating pork raised at a local homestead, you'll never go back to the grocery store for it again.

The broad span that is the pork industry has a well-earned bad reputation. Commercial pig houses farrow hogs in overcrowded conditions, altering their natural behavior and features. Tails are cut and noxious amounts of vaccinations are required to house pigs in too-small shelters and abysmal conditions, leading to contamination of the air and water and creating a toxic, public soup for all parties involved. This cheap meat is built at the expense of the animals' health and welfare and is an environmental nightmare, to boot. Both the Southern Environmental Law Center and the National Institutes of Health have covered these risks in great detail at the website southern environment.org.

YOU GET WHAT YOU GIVE

As with everything, you get out what you put in, and pigs are no different. There will be variations in quantity and quality of meat as you adjust your feed rations and shelter accommodations. Your dollars go further with raising pigs versus any other farm animal. A pig will eat most anything. They are brilliant garbage disposals that turn food scraps in bacon. That is a trade well work making.

Pigs are omnivores. They enjoy vegetables and meats and require lots of protein to put on weight. Raising pigs to size is best achieved economically on a homestead scale when you combine a total mixed ration (TMR) and use of fodder and food waste. This looks like having free-choice pig grain available and supplementing with outside sources. Weed the garden? Toss the cuttings to the hogs. Butcher a chicken? Pass the pigs the leftovers. If it's not pork, then it's fair game and should be shared. There are few things as satisfying as

HOMESTEAD PORK IS SO MUCH HEALTHIER THAN WHAT YOU'LL FIND AT THE STORE!

Homestead-raised pork looks more like prized veal than commercially produced meat, with its deep color and nourishing, brain-boosting fat.

knowing the food waste you'd typically throw away is being turned into more food for your family.

FIRST LITTLE PIGGIE

The first little piggie filled his belly fast and grew into a substantial hog in a short six months. This is your commercial breed hog. They have been bred to reach weight in a short season and do so for many reasons. They turn your feed investment quickly into consumable product and are therefore economical to raise. They grow fast and strong, quickly tipping the scale at 250 to 300 pounds by butchering time. The short grow time, in combination with diligent timing, delivers a finished hog before cold weather hits, eliminating the need for overwintering.

Commercial hogs are known for their grow rate, not their personality. They have long snouts and love to root, dig and wallow in cool mud holes. Yes, they will tear up their paddock, even if it is moved regularly. Commercial hogs will scar the land, so do not put them in a place where this will be an issue. These breeds can be aggressive. They are not snuggle pigs. Breeds to consider are the standard large whites or Yorkshires, fast-growing Berkshires and the belted Hampshires. All these pigs are classified as meat hogs. They are prized for high muscle tone, low fat rate and long bellies; more belly equals more bacon.

SECOND LITTLE PIGGIE

The second little piggie took his time, got full and fat on greens and grass while being gentle on the pasture, reaching weight in 18 months. The Kunekune is the classic gentle-hearted homestead pig. These calm cuties can really stand out in a crowd, with their short stature and small noses. These features keep them friendly to the pasture, eating fodder crops. Yes, they can root but do not do the damage and trenches seen with commercial breeds. Kunekunes are the pet pig in the hog-raising world, both social and friendly. They get along with all the animals in the barnyard.

Kunekunes are slow growing lard hogs who put their protein into mass quantities of renderable lard. The pork chops will be a rich pink magenta hue circled in health amounts of luscious fat. These heritage hogs reach weight of at most 200 pounds in 18 months. In that time, they will eat grass, hay, weed clippings and any table scraps you offer them. Be mindful to the seasons. If you live in areas where winter hits then cold weather shelter will be needed. If you are trying to grow out pigs with zero feed purchased from the store then the resourceful Kunekunes are an ideal choice.

THIRD LITTLE PIGGIE

The third little piggie took notes from the first two and combined the benefits of them both to create a sociable and fast-growing hog that tops the scales at 250 pounds in 10 months. The last pig to join the party is the newest to the bunch and has been creating a buzz in animal husbandry circles. Idaho Pasture Pigs (IPPs) are the result of careful breeding between Duroc, Berkshire and Kunekune breeds. This was done by Gary Farris and Shelly Dixon of Idaho to turn out a pig that is friendly and gentle on the land like Kunekune, but grows to weight and has meat quality similar to a commercial hog. Breed specifics can be traced at the Idaho Pasture Pig Breed Association (idahopasturepig.org).

IPPs were designed for pasture-based systems. These snuggly pigs are outgoing, friendly and feature a body shape that is an elegant combination of the breeds that make them up. The nose is pushed up and prevents their ability to root deeply. They have a long belly, creating brilliant bacon. IPPs require a total mixed ration to grow out efficiently. If pasturing them is your goal, then electric netting and movement will be your friend. Pigs of any breed that are left in the same space will in time turn it into a minefield. If you are looking for lard and meat, then Idaho Pasture Pigs will check every box. They are known for their well-marbled, deep red meat and, when processed carefully, large amounts of fat and leaf lard.

LESSONS LEARNED

The moral that comes from this version of "The Three Little Pigs" is not that there is a right way or a wrong way; the best way is to get brave and get started. Assess your land and time constraints. Ask around what other people in your area have had luck with. Start by sourcing feeder pigs locally. These gilts (weaned female piglets) and barrows (castrated male piglets) can be started in the late spring and early summer and found on local social media platforms or feed store bulletin boards. Start small with two pigs, and learn as you go. The only wrong answer is no answer, because once you start raising your own meat there is no looking back to the sustainability your own landscape can provide.

BUTCHERING BASICS

Pigs can only change into pork after one critically important step happens: butchering. The butcher is an artist whose skill honors the respect for the life given. If this is an endeavor that appeals to you, then the resources to learn this skill are endless. Brandon Sheard is the Farmstead Meatsmith. He breaks down whole-animal butchering on his website and YouTube page, farmsteadmeatsmith.com.

You can never have too much information on the subject. Load your home library with fully illustrated guides and instructions. Adam Danforth wrote an illustrated guide titled *Butchering Poultry, Rabbit, Lamb, Goat and Pork*. James O. Fraioli has a great book as well, called *The Home Butcher*.

If breaking down a carcass from pasture to plate is not a card you want in your deck, there is no need to fear: You can still raise meat for your family. Most small-town butcher shops that process deer will also process homegrown pork. In some cases, they will come to your farm and complete the job there. Be creative and resourceful. The answers are out there.

Andrea Koput is a rustic homesteader who finds passion taking the hard out of old-fashioned skills and from-scratch living. Her family of six are cozy in the woods of northern Wisconsin with their small farm of poultry, dairy animals and organic gardens. Follow her and her homestead's progress on Instagram @homesteadpearls

Tossing food on the grill is fine, but you can make it so much better with just a few more steps.

HOMEMADE

MARINADES

Liven up your meals

BY DANA BENNER

PROVIDING GOOD, HEALTHY FOOD FOR MY FAMILY HAS ALWAYS BEEN A TOP PRIORITY FOR ME, RIGHT ALONGSIDE SHELTER AND CLEAN WATER. THIS LIFESTYLE THAT WE LIVE, AND THAT OF MANY PEOPLE WHO READ THIS PUBLICATION, MEANS THAT WE OFTEN HAVE TO MAKE THE MOST OF WHAT WE HAVE ON HAND.

When it comes to cooking and preparing meals, we often have to get creative.

Simple living doesn't mean cooking needs to be bland. The strategic use of easy-to-make sauces and marinades can truly turn the mundane into something special. While I am not a big sauce fan, with the exception of a really good barbecue sauce, I do love to use marinades. The beauty of marinades is that there is no right or wrong way to do them. You can make them as simple or as complicated as you wish. Give yourself permission to play around with recipes.

Marinades are acidic and will tenderize the food before it is cooked.

WHAT IS THE DIFFERENCE?

There are a few distinct differences between sauces and marinades. First, sauces are usually thicker and are fat- and sugar-based. Sauces are designed to cover the food during and after the cooking process. Marinades are acidic and are designed to help tenderize the food, while at the same time infuse it with flavor. Depending on the food used, the marinating time will vary from a few minutes to many hours. Seafood, due to its makeup, is only marinated for a half hour or less, where red meat, like venison or beef, can take a full day.

I have traveled across the United States and matter where I have gone, I have found different takes on marinades—everything from whiskey-inspired recipes in Kentucky and Tennessee, to rum-inspired mixtures from Key West. Then there is the Mexican influence in the desert Southwest, where chiles are the name of the game. What follows are my takes on some of these different regional marinades.

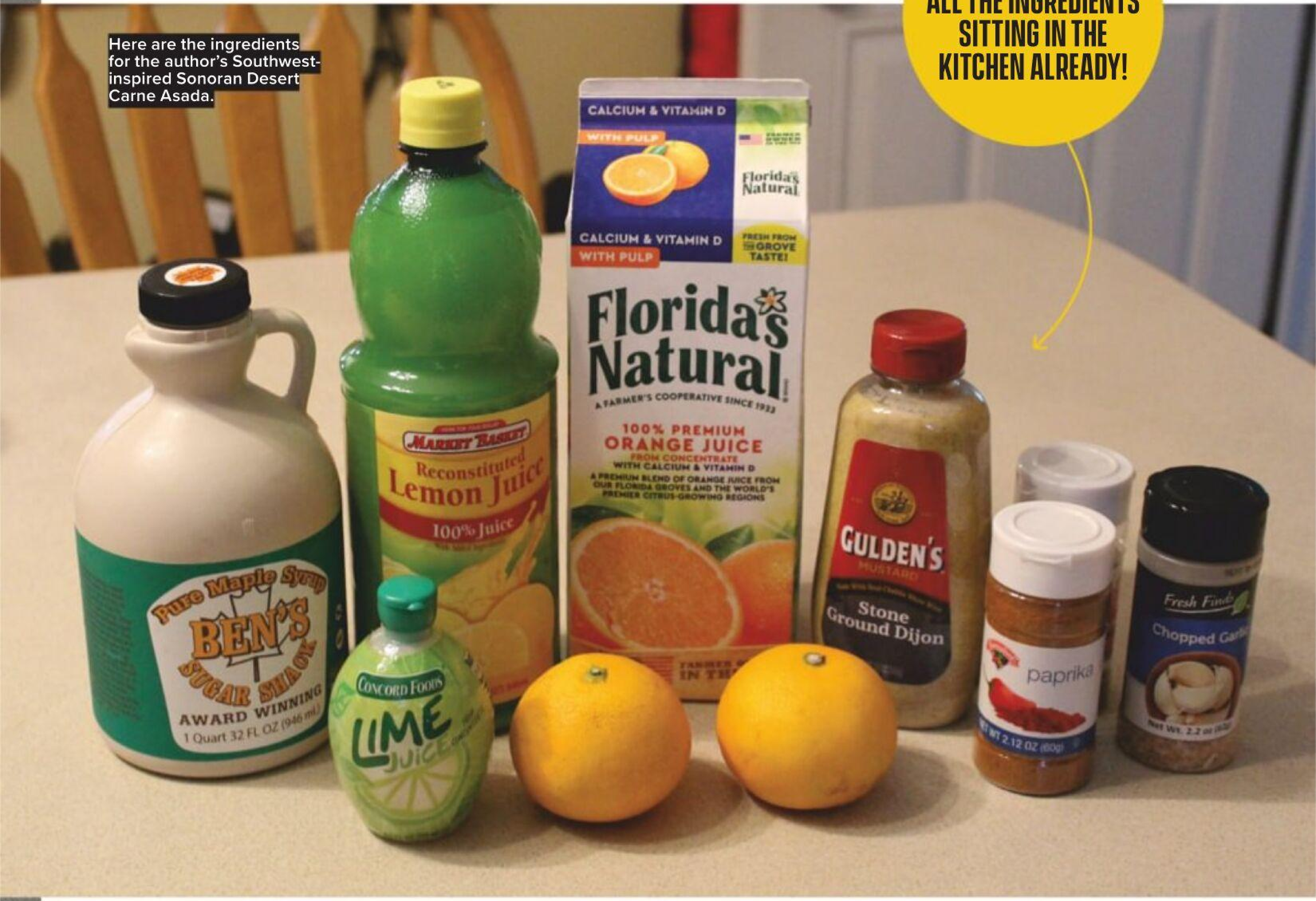
Sauces are added to the food during and after the cooking process.

WHAT TO USE

I'm a firm believer in using fresh ingredients whenever possible. Unfortunately, that is not always an option. Most of my ingredients come straight from my garden or from local farms, but I live in New Hampshire, so things can be limited. Here, items such as Scotch bonnet peppers are hard to find because they are not grown locally. When this happens, we have to adapt and use what is available—and that's OK. Part of living this lifestyle means dealing with what is handed to you.

When cooking a regional-themed recipe, I want to keep it as authentic as possible. A good example is my Key West Rum Marinade. I used rum from St. Croix and instead of Scotch bonnet peppers (which I could not find) I used a pepper sauce brought back from the Cayman Islands by a good friend of mine. The main ingredient in the pepper sauce is Scotch bonnet peppers so I figured I was OK. The bourbon I used in the Kentucky Honey-Bourbon Marinade came from Kentucky (because it was the right thing to do). The spices used in the recipes were picked up at local stores, as was the citrus. It was much less expensive getting lime and lemon juice than it was the fresh fruit.

Part of living this lifestyle means being smart enough to know when to save a penny when you can and being resourceful. If I lived in Florida or Hawaii, fresh fruits, herbs and vegetables would be available year-round, but such is not the case for me. Never hesitate to use dried or frozen when



Here are the ingredients for the author's Southwest-inspired Sonoran Desert Carne Asada.

MOST OF US HAVE ALL THE INGREDIENTS SITTING IN THE KITCHEN ALREADY!

fresh is not available. Change things up based on what you have. That's what I do. From the photos in this article you will see I did just that. Remember, recipes are just guides; you can't mess it up and it will all work out.

With each of these recipes, you'll mix all of the ingredients together in a bowl large enough to hold whatever you'll be marinating.

RECIPE

Key West Rum Marinade

In Key West, there are two constants: seafood and the Caribbean influence. The following recipe is perfect for all seafood, but I really like it with shrimp. It also works great for chicken.

Ingredients

- 1 cup rum (while any rum will do, I prefer to use dark rum)
- ¼ cup honey (to keep the Caribbean flair, I sometimes replace the honey with molasses)
- 1 tablespoon vanilla extract
- 1 teaspoon ground allspice
- 1 teaspoon ground cinnamon
- 3 tablespoons minced fresh ginger
- 2 garlic cloves, minced
- 1 Scotch bonnet chile, minced (Scotch bonnet peppers are big in the Caribbean, but feel free to substitute any chile pepper that you have)
- ¼ cup lemon (or lime) juice

RECIPE

Naples Citrus Marinade

This is another idea originating from the Sunshine State and as you can probably figure out, it has citrus as the main ingredient. This is my go-to marinade for chicken and pork.

Ingredients

- ½ cup orange juice
- 1 tablespoon orange zest
- ¼ cup lemon juice
- 1 tablespoon lemon zest
- ¼ cup lime juice
- 1 tablespoon lime zest
- ¼ cup maple syrup
- 3 tablespoons olive oil
- 2 tablespoons Dijon mustard
- 1 tablespoon paprika

- 1 teaspoon red pepper flakes
- 3 garlic cloves, minced (feel free to substitute 2 tablespoons of dried minced garlic)

RECIPE

Sonoran Desert Carne Asada

Carne asada translates to “roasted meat” and it has traditional ties to both Latin America and Mexico. In southern Arizona, the number of recipes for carne asada could rival the number for making jambalaya in Louisiana. This is one of my favorite marinades for beef, venison or any red meat.

Ingredients

- ¾ cup orange juice
- ½ cup lemon juice
- ⅓ cup lime juice
- ½ cup soy sauce
- ½ cup chopped cilantro
- 3 tablespoons minced garlic
- 1 tablespoon chile powder
- 1 tablespoon ground cumin
- 1 tablespoon paprika
- 1 tablespoon chopped chipotle pepper
- 1 teaspoon oregano
- ½ cup olive oil

RECIPE

Kentucky Honey-Bourbon Marinade

While bourbon is distilled just about everywhere, even here in New Hampshire, Kentucky is the true home of this particular type of whiskey—which makes it all the more fitting that I learned about this recipe while on assignment in Kentucky a few years ago. Like with all of the recipes, I have changed it a bit to meet my needs, and so should you. This marinade is perfect for red meat, chicken and vegetables.

Ingredients

- ½ cup honey
- ½ cup brown sugar
- ½ cup bourbon
- ¼ cup soy sauce
- ¼ cup Worcestershire sauce
- 2 tablespoons minced garlic

If you put the time and effort into them, all meals will turn out great. In a world of quick and easy and fast food, sometimes it is good to step back, take a deep breath and actually put yourself into a meal. Whether you have a great deal to eat, or just a little, a good marinade can turn the ordinary into something special.

When I was growing up, we didn’t have much. Spam was considered a major food group, alongside hot dogs (the cheap ones, not the all-beef ones in the fancy packages). I learned that it wasn’t the food that made the meal. It was the love and effort my mother put into it that made it special. Marinades help you do just that.

The ingredients for the Key West Rum Marinade. Don’t be afraid to substitute ingredients. Scotch bonnets were not available, so the author substituted a hot sauce made with those same peppers.

CRUZAN
AGED DARK RUM
pure vanilla extract
BADIA
Cinnamon
TORTUGA
BADIA
Ginger
Fresh Finds
Chopped Garlic
Honey

Dana Benner lives in New Hampshire, but travels a great deal. His written work appears in numerous print publications. He also hosts and produces outdoors- and history-related programming for HCTV in Hudson, New Hampshire, and gives lectures on living sustainably.

THE DIVINE CARROT

A lot more than rabbit food

BY ANGELINE HAWKES

Nearly all carrots grown in the USA come from California, with the rest coming from Florida, Michigan, Texas, Washington and Wisconsin.

CARROTS OFTEN EVOKE AN IMAGE OF A CARROT-MUNCHING BUGS BUNNY. AVAILABLE IN A RAINBOW OF COLORS–ORANGE, PURPLE, RED, WHITE AND YELLOW–CARROTS ARE MORE THAN A SIDEKICK FOR CARTOON BUNNIES.

The carrot (Daucus carota) is a root vegetable and member of the Apiaceae family, which also includes celery and parsley. About 40 metric tons of carrots are produced annually. China grows 45% of the world's carrots, with the United States as the second-largest carrot producer. California grows about 80%-90% of carrots grown in the USA. In 2022, the average U.S. citizen consumed 8.4 pounds of carrots a year.

BUNNIES AND CARROTS?

According to United Kingdom's Royal Society for the Prevention of Cruelty to Animals, rabbits don't eat root vegetables; they eat grasses and hay. So where did all this bunnies-love-carrots business come from? In 1934, Clark Gable starred in the box-office hit *It Happened One Night*. It was the highest-grossing film of the year and won five Oscars. In the popular rom-com, Gable plays a reporter who was addressed as "Doc" by a supporting character. Claudette Colbert was cast alongside Gable and is the focal point of a conversation during which Gable chomps on a carrot while talking. In 1940, the Merrie Melodies cartoons, under the production of Tex Avery, spoofed the 1934 movie with the cartoon episode "A Wild Hare." Bugs Bunny chews on a carrot and quips the oft-repeated phrase, "What's up, Doc?" Moviegoers of the time would've recognized the reference to Gable's *It Happened One Night*. The "A Wild Hare" episode became so popular that people started associating rabbits with carrots.

HISTORY OF THE CARROT

The iconic carrot originally wasn't orange. Yellow carrots, and some purple varieties, grew wild in Africa, Asia and Europe. Domestic carrots had their beginnings in the ninth century in the area now known as Afghanistan. It wasn't until the 15th century that the familiar orange carrot came onto the scene—a cross between yellow and white carrots. Today, the common orange carrot is the biggest source of vitamin A in the diets of Americans.

TYPES OF CARROTS

While there are hundreds of varieties of carrots, there are four main types: Chantenay, Danvers, Imperator and Nantes. Chantenay are bulkier and thicker than other carrots and have a rounded, blunt tip. They are cool-weather carrots that grow well in clay soils. Chantenay are the go-to for freezing and canning. Danvers most fits the classic image of an orange carrot with the rounded tops and pointy ends. These 6-to-7-inch carrots are known for their excellent storage qualities. The most popular North American type, Imperator carrots, are the sweetest carrots and grow up to 10 inches long. These carrots are best for fresh eating and most grocery store-packaged "baby carrots" are pieces of Imperator carrots. Nantes originated in France. Growing from 3 to 7 inches long, they are smooth and maintain the same diameter on each end.

NUTRITIONAL VALUE OF CARROTS

Orange carrots contain the antioxidant beta carotene, which the body converts into vitamin A. Vitamin A aids the immune system, promotes cell growth and improves eye health. Carrots are rich in antioxidants, vitamin B6, vitamin C, vitamin K, potassium and soluble fiber.

In addition to being cholesterol- and fat-free, they are a low-calorie, low-sodium food.

Carrots can lower blood sugar levels, promote healthy gut bacteria, lower cholesterol levels, aid in lowering blood pressure and encourage healthy bones. Cooking carrots releases lycopene, an antioxidant that may reduce the

There are over 500 varieties of carrots worldwide.

A YouGov survey found that carrots are the third-most popular vegetable in the U.S., behind potatoes and corn.

risks of leukemia and cancer and lowers risks of heart disease. About 25% of people with pollen-related food allergies will be sensitive to carrots.

GROWING CARROTS

Learn about carrots and your planting zone at your state's extension office website. The USDA joined with universities in 1914 to create a network of agricultural knowledge referred to as extensions. Find your nearest extension in the USDA's National Institute of Food and Agriculture directory: nifa.usda.gov/land-grant-colleges-and-universities-partner-website-directory. Carrots are planted from seed. They prefer loose sandy or silty loam, which drains well. Adequate air and water drainage are essential. Dense or rocky soil will cause deformed carrots. If planting them in raised or container gardens, make sure they have 18 to 24 inches of soil. They prefer a neutral pH level and thrive in full sun. Too much nitrogen in the soil will cause carrots to crack (avoid adding fresh manure or other nitrogen-rich fertilizers without first testing the soil). They love temperatures of 45 F to 75 F. Higher temperatures alter the carrot's taste (too woody) and color, and can cause them to go to seed. Watering should be according to your zone's requirements and is crucial during germination, as carrot seeds are shallowly planted and soil dries out quickly. Most carrots are resistant to diseases and pests, with cavity spot and nematodes being the exception.

HARVESTING CARROTS

Consult the seed packaging information for the estimate on days until harvest. Generally, harvesting takes place 85 to 135 days after planting or germination. Harvest carrots by loosening the dirt around the root and then pulling the carrot from the soil by its green leafy top. Dense soil may cause the top to break, leaving the carrot in the soil, necessitating digging the root from the ground. Carrots may be harvested on an as-needed basis, leaving some in the ground to continue growing while others are picked and eaten.

STORAGE OF CARROTS

The key to successful carrot storage lies in temperature and moisture regulation. Too much moisture will result in various types of rot. Carrots should be stored in environments between 32 F and 40 F, with good airflow, and will store for about seven months. Never store carrots near fruits that produce ethylene (bananas, apples, melons). Ethylene is referred to as “the ripening hormone,” or more ominously, “the death hormone.” Ethylene will age, ripen and eventually lead to the decomposition of fruits and vegetables. For refrigerator storage, brush the soil from the carrots and remove the leafy greens. Don’t wash or peel the carrots. Let the carrots dry for a few days before refrigerator storage. Roll carrots in paper or cotton towels and place in zip-lock bags or in airtight food containers. Store in the refrigerator for up to four weeks.

Carrots are a low-acid food and must be canned in a pressure canner. The carrots here are packed for short-term storage in a refrigerator.

KEEP A JAR OF CARROTS IN THE REFRIGERATOR FOR QUICK AND EASY SNACKS!

For longer storage of carrots, storage in boxes, crates or plastic tubs of sand in cellars or basements works well. Cool, dark locations with 90% to 95% humidity are ideal. With carrot storage there is a fine line between too much and not enough moisture. Too much leads to rot, and too little leads to the vegetable drying out. If the climate is right, you may be able to store carrots in a garage, porch, shed or even an unheated room. Alternatives to sand are dry leaves, mulch, peat moss, sawdust or wood chips. Don’t wash or peel the carrots, but remove the leafy tops (they leach moisture from the carrot). Pour 2 to 4 inches of damp play sand into a container and form a layer of carrots on top, cover with 1 inch of sand, and repeat until the container is full. The carrots may touch each other, but don’t pack them too densely. To use the carrots, remove desired carrots and re-cover the others. When properly stored, carrots will last four to seven months before degradation begins.

If fresh storage isn’t an option:

- **Freezing**

Wash and peel the carrots, then chop, slice, dice or shred them. Carrots must be blanched before freezing to protect the color and texture. Place 1 pound of carrots into 1 gallon of boiling water and boil for 5 minutes (diced or thinly sliced carrots, such as julienned, require 2 minutes). Remove the carrots and immediately place them into ice water. Remove the chilled carrots and let them drain on a dry towel. On a baking sheet, spread the carrot pieces in a layer, and place the baking sheet in the freezer for 1 to 2 hours. Remove the carrots and place into zip-lock freezer storage bags or containers, removing as much air as possible. Store the bags or containers in the freezer for up to 12 months.

Dehydrating

Wash and peel the carrots, then slice or dice them. The thicker the piece, the longer it takes to dehydrate. Spread the pieces on dehydrator trays or, if drying in the oven, place them on a baking sheet. Dehydrate until the carrots are crisp. In the oven, preheat to 200 F and open the door a crack when the baking sheet is inside. Bake until the carrots are crisp. Vacuum-seal them in bags or jars indefinitely, or store in airtight jars with food-grade moisture absorber packets for up to a year. Rehydrate carrots using 2 cups of water per 1 cup of dehydrated carrots. Soak the carrots for 1 to 2 hours until hydrated. Alternatively, place the carrots in a pan of water and simmer until soft. A third method is to place the carrots in a pan or bowl and pour boiling water over them. Soak for about 30 minutes or until soft.

Canning

Carrots maintain their firmness very well during the canning process. Carrots are a low-acid food and must be canned in a pressure canner. Canning manuals give instructions on canning carrots. If the jar is properly sealed, food can last for years.

Cooking carrots releases lycopene (an antioxidant), which reduces the risks of leukemia and cancer and lowers risks of heart disease.

COOKING CARROTS

Carrots may be cleaned, peeled or (if not peeling) scrubbed with a vegetable brush, and sliced, diced or shredded to consume fresh, cooked or baked.

Oven Baking Carrots

Usually, carrots are baked alongside meat such as chicken. Carrots may be baked alone. At 400 F, bake them for about 20 to 25 minutes until they are tender when fork-pierced.

Baking Carrots in Coals

A wonderful addition to an off-grid meal is coal-baked carrots. Place washed carrots (peeled or unpeeled, cut or whole as desired) into the center of a rectangle of foil. Add butter or oil and seasoning (such as salt, pepper and garlic powder)—or butter and brown sugar—and fold the foil into a pouch. Prepare a layer of red coals or embers near the main fire (or in a grill) and place the foil pouch on top. Scoop additional red coals or embers over the pouch and bake for about 20 to 30 minutes, depending on the size of the carrot pieces.

On the Stove

Carrots may be boiled in water or broth, or added to soups and other dishes with liquid. They may be fried in butter or oil. Carrots may be cooked on the stove in all forms (diced, sliced, chopped), but as with all cooking methods, the denser the carrot piece, the longer the cooking time required.

Angeline Hawkes writes for *Backwoods Survival Guide*, *Backwoods Home Magazine*, *Prepper Survival Guide*, *Self-Reliance Magazine* and others. Visit her YouTube channel, Canterbury Trails Farm: https://www.youtube.com/c/CanterburyTrailsFarm

OIL LAMPS 101

This little light of mine

BY ANGELINE HAWKES

OIL LAMPS ARE KNOWN BY INTERCHANGEABLE NAMES SUCH AS KEROSENE LAMP, PARAFFIN OIL LAMP AND HURRICANE LAMP. THESE LAMPS EVOKE IMAGES OF TIMES PAST, BUT OVER 500 MILLION HOUSEHOLDS WORLDWIDE DEPEND ON OIL LAMPS FOR LIGHT.

It's never a bad idea to stock up on various options to light the way during a power outage.

THERE'S JUST SOMETHING EVOCATIVE ABOUT LAMPS LIKE THIS, RIGHT?

In India alone, 44.4% of rural populations use kerosene lamps as their primary, if not only, source of lighting. In many African countries, including Ethiopia, Kenya and Uganda, more than 60% of households rely on kerosene lamps for their main light source. These might be startling figures to most of the industrialized world, but as of 2021 over 754 million people across the globe (60,000 in the United States) had no access to electricity in the home.

LAMP DESCRIPTION

The simplest of lamps are referred to as dead-flame lanterns. These are lamps with oil and a wick. The wick is partially immersed in the oil. You light the wick, and the wick burns as it absorbs the oil from the fuel storage area in the lamp. There are metal prongs to hold a glass chimney that surrounds the flame and reduces the risk of fire. Most lamps have a knob to lower or raise the wick to adjust the flame.

The other term describing oil-burning lamps is flat-wick Lamp. This is the same concept as before with a length of a flat, fiber wick fed through an adjustable burner component that can adjust the flame. All flat-wick lamps utilize the dead-flame burner concept of cold air and fuel below the wick, a wick, and fire in the center, with hot air rising above the flame. Ancient-style lamps, known as simple wick lamps, have stringlike wicks inserted into oil and held aloft by a spout or device. The term “hurricane lamp” is often interchanged with “oil lamp.” Hurricane lamps are portable oil lamps with a metal encasement to protect the globe and a handle by which to carry or hang the lantern. This lantern is used outside, such as during camping trips.

LAMP ANATOMY

Glass chimneys can be different shapes and colors. Chimneys are also called globes. Chimneys fit onto the lamp’s metal burner between metal prongs. It’s important the chimney fits the burner tightly or air will enter between the chimney and the burner, and a wind effect will cause flickering or

Lamps are particularly good for lighting small areas, such as tables or rooms.

With a little elbow grease, it'll be as good as new.

extinguish the flame. Chimneys can be replaced. Measure the diameter of the burner to determine the size of the chimney neck.

The burner is a metal device that screws into the collar of the oil fount (neck above the fuel reservoir) and contains the "throat" (slit) where the wick feeds in and out. A knob to adjust the wick's height is also attached. Atop the oil fount there is a collar. This is a metal threaded ring that's crimped or adhered to the glass lamp reservoir/fount. Some glass oil founts are threaded at the top to allow for a screw-on collar. The burner screws into the collar. To determine what size burner a lamp requires, measure the inside diameter of the collar opening. To determine what size collar a lamp requires, measure the external diameter of the oil fount opening. There are three standard American lamp collar sizes: No. 1 has a 7/8-inch diameter opening, No. 2 has a 1 3/16-inch diameter opening and No. 3 has a 1 13/16-inch diameter opening.

The bottom end of the wick sits in the fuel inside of the oil fount. The top end of the wick is inserted up through a holding mechanism within the throat of the burner. The holding mechanism is attached to the adjustment knob and allows the wick to be raised and lowered to adjust the flame. The wick absorbs fuel and burns when lit.

The oil fount or fuel reservoir of the lamp is where the oil is stored. Sometimes there's a separate cap to unscrew to fill the lamp, but usually the chimney is removed, the burner unscrewed, and the fuel is poured through the collar and into the reservoir.

TYPES OF OIL

Up until the middle of the 19th century, whale oil was the most commonly used lamp oil. But as whale oil became too expensive, kerosene became the go-to. Kerosene was first created in 1846 from distilled coal by geologist Abraham Gesner.

Kerosene and Paraffin Gesner registered Kerosine as a trademark for the product, but eventually the brand became the name of the fuel. In the U.K. and other countries, kerosene is referred to as paraffin. Kerosene is distilled and processed petroleum created by separating the compounds of crude oil. The result is a thin, clear oil: kerosene. Paraffin is kerosene that is even more refined. This makes burning paraffin oil cleaner with less soot than kerosene produces. When purchasing kerosene lamp oil, it's important to know if the oil is intended for indoor or outdoor use. Most kerosene is intended for outdoor use, for example in outdoor lanterns or porch torches. When stored in an airtight container, kerosene has a five-year shelf life. Paraffin oil is a clean burning fuel and can be used indoors or outdoors. When purchasing paraffin oil in the U.S., it's important to know what you're buying. Most paraffin oil sold in the states is liquid candle wax used in making candles and shouldn't be used in lamps.

Lamp Oil There are two types of lamp oil. This general term refers to either a kerosene-based oil or a paraffin-based oil. Paraffin oil is not the same as paraffin-based lamp oil. The lamp oil has gone through more processing, yielding a cleaner burn. The kerosene oil can be either purified for inside use or nonpurified for outdoor use. Be sure to read the packaging. Lamp oil must be stored in airtight containers to reduce evaporation. Evaporation turns the oil into sludge, which makes it unusable in a lamp. Lamp oil should be clear. If it's too cloudy to see through, don't burn it in a lamp. Lamp oil should be stored at room temperature.

OIL LAMP SAFETY

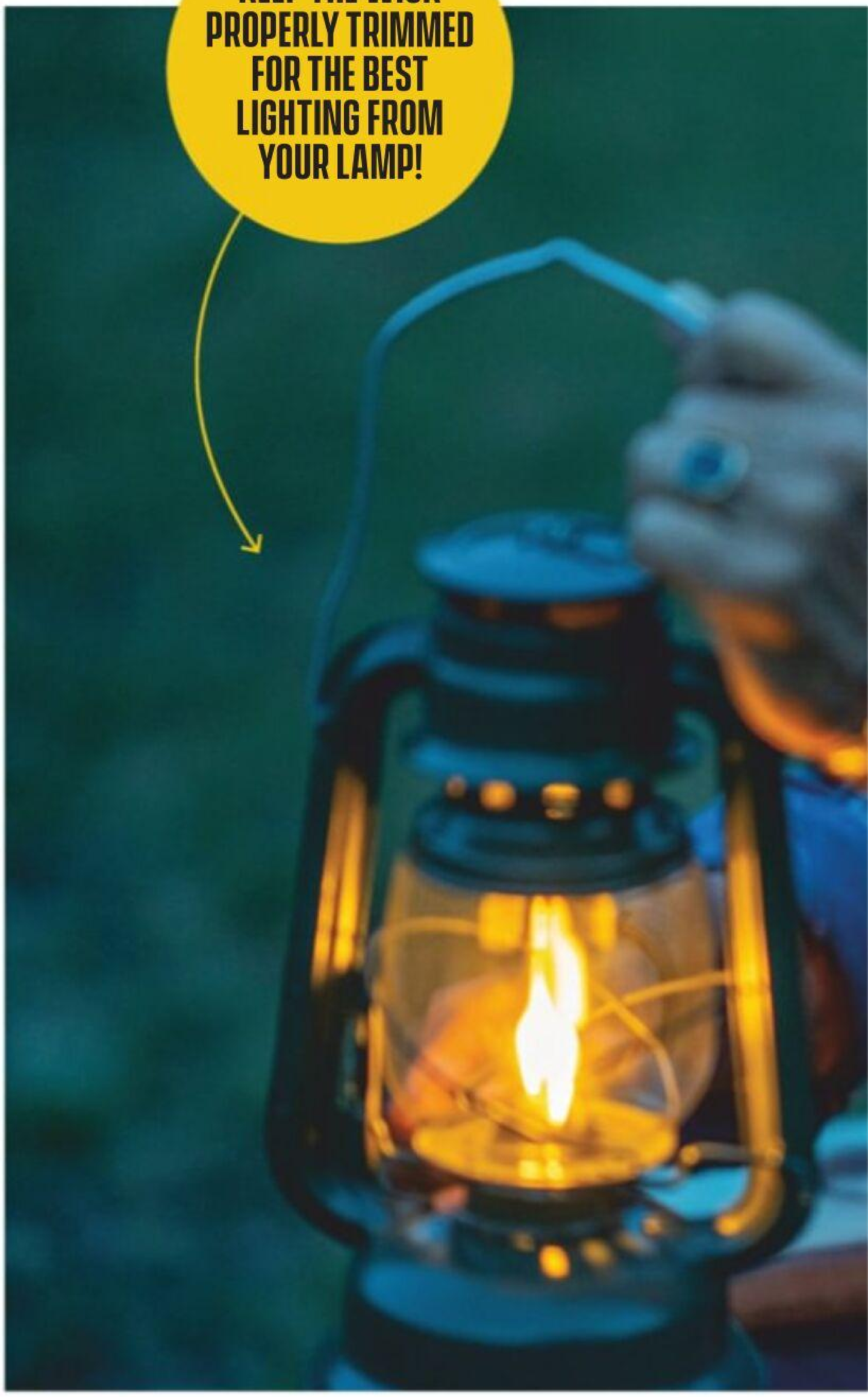
Use lamps on a flat, sturdy surface away from combustible materials. The lamp shouldn't rock or slide around. Outdoor lanterns should be placed away from anything that could catch fire. Whenever using fire outdoors, it's a good idea to have a water source nearby. Never use fuels not intended for lamp use in a lamp; these include "Coleman" fuel, gasoline, mineral spirits/paint thinner, turpentine or wood alcohol. Oil expands in warm weather and can overflow the lamp if there's not enough room for expansion. Keep lamp fuels out of the reach of pets and children. Lamp oil ingestion poisoning is a common danger in countries with high lamp usage, due to the storage of lamp fuels in recycled containers such as water bottles. The chimney and lamp can become hot enough to burn skin. Always keep hot lamps away from high-traffic areas, children and pets. Even lamps not in use pose a danger of breaking, so always keep a lamp in a secure location. Never leave a lamp unattended when lit or burning overnight.

Other Fats and Oils
In different parts of the world, animal fats are often burned in lamps: butter, fish oil, ghee, and seal and whale fats. There are many oils that can be used in lamps: coconut oil, nut oils, olive oil and other seed oils (flax, grapeseed, sesame). Olive oil is a clean-burning oil and is nontoxic and smokeless. Coconut oil, too, burns clear and creates almost no soot. Standard cooking "vegetable" oil should be avoided, as it burns with heavy smoke.

To fill a lamp, remove the chimney. Unscrew the burner. Insert a funnel through the hole in the collar and pour the oil into the lamp oil reservoir. Fill it about 75% to 85% full. Lamps burn approximately a half ounce of oil per hour. Lamp oil should be at least 1 inch deeper than the wick end inside. Put the lamp together and let the wick absorb oil for a half hour before use. The wick's color darkens as it absorbs oil.

WICKS

Wicks are made of 100% natural fibers, such as cotton. Keep a wick trimmed so it will provide a steady flame, which yields the maximum amount of light and minimal smoke. A ragged wick will burn unevenly. This creates an overabundance of soot and smoke, making the wick burn faster and wasting oil. A well-performing wick produces a steady flame of about ½ to 1 inch high. Wicks are available in precut lengths of about 8 inches or in spools that allow you to cut the desired amount. To determine the width of the wick necessary for a lamp, measure the "slit" in the burner through which the wick feeds. Sometimes it's easier to measure from the underside of the burner. To trim the wick, remove the chimney and turn the adjustor knob to raise the wick. Using sharp scissors, cut straight across the top of the wick, and then cut off both corners.



KEEP THE WICK PROPERLY TRIMMED FOR THE BEST LIGHTING FROM YOUR LAMP!

Otherwise, the corners of the wick burn will fuel faster and the flame will peak higher on the corners and have a lower center flame. Adjust the wick back to burn length and let it absorb oil for at least a half hour before use. Replace the chimney.

USING THE LAMP

To light, remove the chimney. The wick should be 1/8 to 1/4 inch above the burner "slit"/throat. Light the wick. Maintain a low flame for a few minutes while the flame intensifies. Using the adjustor knob, raise or lower the wick as necessary to no more than 1/8 inch above the metal. A wick that's too high will create soot and smoke and burn more fuel. If a lamp is smoky, try lowering the wick.

To put out the lamp, rotate the adjustor knob, lowering the wick into the burner throat or slit until the flame extinguishes. This must be done slowly, because lowering the wick too far inside the lamp will cause it to come loose from the burner mechanisms. The chimney will be hot! Don't touch it until it's cool.

Lanterns and lamps should be stored indoors, away from moisture, at room temperature. If you must store lanterns outdoors, empty the fuel prior to storage. To clean a lamp, remove the chimney, burner and wick, and pour the fuel into a safe storage container. Fill the oil reservoir with soapy, warm water and allow it to soak overnight. Discard the water and rinse. Completely dry the lamp before refilling or storing. Dish soap, glass cleaner or vinegar are good cleansers for chimneys. Soak the chimney, then hand-clean. Newspaper, paper towels or cotton rags are good cleaning materials. Completely dry the glass before the next use. A wet chimney could shatter. The burner should be kept free of soot or carbon residue to allow for smooth operation of the wick and to allow venting of the oil reservoir. When the burner becomes dirty, unscrew it from the collar and soak it in 1 cup of white vinegar for about an hour. Remove the burner and use salt as a scouring powder, sprinkling it onto any debris, and scrub it clean. Rinse the burner in a bowl of hot, soapy water, then rinse in clean, running water. Towel-dry and reattach it to the collar. Once it's reassembled, you're ready to go.

Maintaining your lamp, which includes cleaning the glass, will keep it in top shape for years to come.

CHAPTER 3

DIY PROJECTS

WITH SOME BASIC KNOWLEDGE AND A BIT OF ELBOW GREASE, YOU CAN DO ALMOST ANYTHING.

OUT OF HIBERNATION

Prepping your tent for spring camping

BY ALICE JONES WEBB

They come in different shapes and sizes, but the process of prepping and maintaining a tent is fairly universal.

EARLY SPRING PROMISES WARMER TEMPERATURES, AND WITH MORE HOURS OF SUNLIGHT, MANY PEOPLE GET A MAJOR ITCH TO VENTURE INTO THE WOODS OR MOUNTAINS.

Getting outdoors is a great way to shake off the doldrums of a long winter spent mostly inside, so it should be no surprise that spring is when people start pulling the camping gear from the closet. The last thing you want is to be miles from home (or the nearest sporting goods store) only to discover your tent isn't up to par. Whether you're a seasoned camper or a total beginner, there are a few easy steps you should take to get your tent ready.

HEALTH CHECK

After months of storage, your tent deserves a careful inspection before you venture into the great outdoors. The best way to give your tent a thorough health check is to assemble it completely. This includes setting up the poles, securing the rainfly, and giving the zippers a good test drive.

Once your tent is properly pitched, examine the tent fabric for any signs of damage, such as tears, holes or thinning areas. It's crucial to pay special attention to high-stress areas like the corners, seams and points where the poles attach. Early detection of potential issues in these areas can help prevent surprise problems when you're away from civilization.

Tent seams are vital for keeping the elements at bay. Inspect interior and exterior seams for wear, fraying or separation. Seam tape, which is regularly used to waterproof tents, will degrade over time, so look for peeling or cracking.

Tent zippers often take a beating and are usually the first component to suffer from wear and tear. Test all zippers on the doors, windows and vents to ensure they function smoothly. Check for snags, missing teeth or difficulty in sliding.

Your tent poles should be straight and free of cracks or bends. Check for any splintering in fiberglass poles or kinks in aluminum ones. The elastic shock cord inside the poles may have lost its elasticity, so give it a gentle tug to see if it still functions well. Also, give your tent stakes a once-over to look for rust, bends or breaks.

WASH AWAY WINTER

Even if your tent was clean before it was stuffed in storage, it's a good idea to freshen it up before your first camping trip. Dirt, dust and musty odors can accumulate over time, and most storage areas aren't particularly sterile.

JUST A LITTLE UPKEEP WILL ENSURE YOUR TENT LASTS SEVERAL SEASONS!

Campers can reapply the DWR coating with a spray-on treatment.

Start by giving the fabric a good shake to remove dust and dirt that may have settled during storage. Next, gently scrub the tent surfaces inside and out; use lukewarm water, mild, nondetergent soap, and a sponge or soft cloth. Avoid harsh detergents or bleach, which can damage the tent's waterproof coating. If there are any mold or mildew spots, they may require a little extra attention and elbow grease. This is an excellent time to watch for leaky areas, especially seams and high-stress areas.

Zippers can trap dirt and sand, causing them to seize. Use an old toothbrush to clean the zippers' teeth. Lubricate them with zipper lubricant to keep them running smooth.

After cleaning, let your tent dry thoroughly to prevent mold and mildew before packing it back up. Set it up in a well-ventilated area, preferably outdoors, and let it air-dry.

TENT FIRST AID

The cleaning and inspection process may have revealed areas that need repair. It is best to address those issues before you hit the road.

A simple tent patch kit will probably suffice to mend small holes or tears. These kits typically include adhesive patches that work like bandages. Before applying a patch to the affected area, ensure the surface is clean and dry, and follow the manufacturer's directions for the best results.

For larger tears, you can use a patch made from the same or similar fabric as your tent. Use a needle and strong thread to sew the patch over the tear. Then, apply seam sealer to the edges of the patch to help prevent leaking.

To fix seam issues, apply a brush-on liquid seam sealer or mend them with sealing tape. Focus on the inside seams where the rainfly and tent floor meet the walls. Before you apply seam sealer, clean the repair area with rubbing alcohol or white vinegar. Brush or squeeze the sealer along the seams, covering the stitching fully. Allow the sealer to dry completely before repacking your tent.

Damaged poles can often be repaired with a pole repair sleeve or splint. These slide directly over the damaged section and are held in place with duct tape or a hose clamp. If the elastic shock cord inside the poles has lost its elasticity, it can be replaced with a new cord. Many tent manufacturers also offer replacement poles that you can purchase individually rather than replacing the entire tent.

If the stakes are bent, you can attempt to straighten them with a hammer or pliers. If they are rusted or severely damaged, it's best to go ahead and replace them.

GEAR AID
TENT POLE SPLINT
ATTELLE DE PIQUET DE TENTE
GET SOME SUPPORT
For poles up to 1/2" (12mm) in diameter.
POUR UN DÉPANNAGE RAPIDE
Pour des piquets d'un diamètre de 12mm max.
PARTS / PIÈCES
A splint is a convenient and affordable way to repair a damaged pole.

SEALING THE DEAL

A waterproof tent is essential for keeping you dry, even if you aren't expecting wet weather on your camping trip. Spring showers can pop up unexpectedly, and morning dew can accumulate quickly. Even if your tent was waterproof when you bought it, waterproofing is one of the first things to degrade, even on top-quality tents.

Most tents come with a durable water repellent (DWR) coating on the rainfly and outer fabric. Over time, this coating can wear off, making the fabric less water-resistant. Fortunately, campers can reapply DWR coating to their tents with a spray-on or wash-in treatment. Apply the product evenly across the tent's exterior surface, following the manufacturer's instructions. Allow the tent to dry entirely before disassembly.

PACKING IT UP

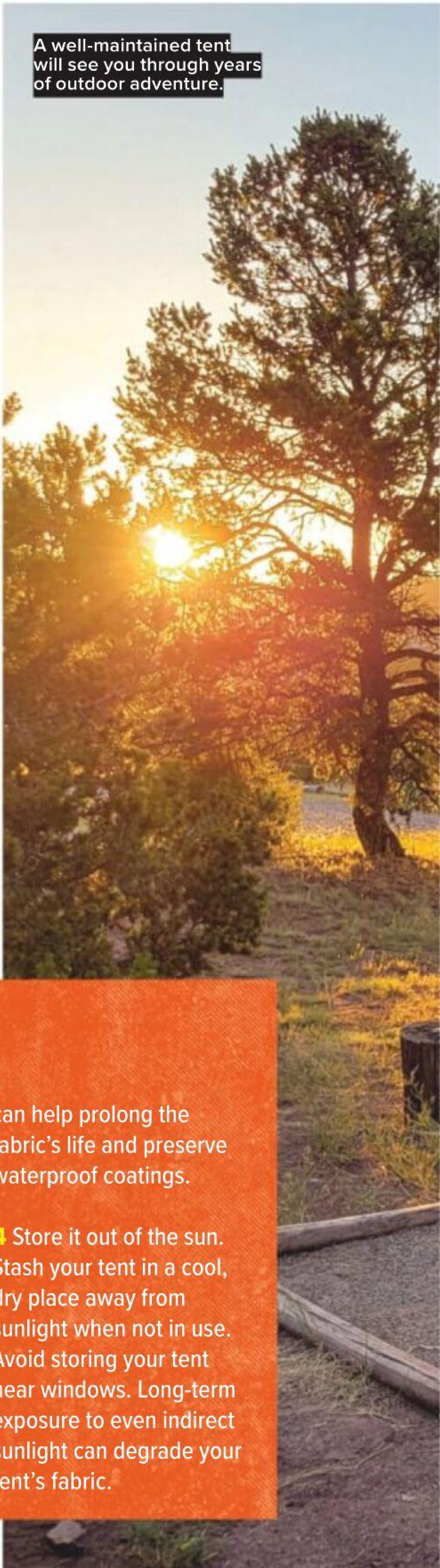
Properly storing your tent is crucial to extending its life and usefulness. Before you return it to off-season storage, here are some tips to ensure it stays in tip-top shape.

Always make sure your tent is completely dry before storing it. If bad weather demands you break camp before your tent dries, repitch it when you get home so it can air out. Even a tiny amount of moisture can lead to mold and mildew, damaging the fabric and creating unpleasant odors.

While it can be tempting to stuff your tent in an attic, basement or garage, these areas can be damp and prone to dramatic temperature shifts. Instead, find a cool, dry place to store your tent. Under the bed or in a closet in a temperature-controlled room are ideal spots for your tent to hang out between adventures.

FINAL THOUGHTS

Properly prepping your tent for camping season is vital to ensuring a successful and enjoyable camping experience. Follow these steps, and you can extend the life of your gear, enhance your outdoor adventures, and maintain your happy camper status this camping season.



A well-maintained tent will see you through years of outdoor adventure.

PREVENTING UV DAMAGE

One of the leading causes of tent deterioration is sun exposure. Ultraviolet light can fade colors, weaken fabric and impair water-resistant coatings over time. Here are some essential tips to minimize UV damage and help extend the life of your tent:

1 Choose a shady campsite. Natural shade can significantly reduce UV exposure. If there isn't much shade at your chosen campsite, a tarp, canopy or sunshade can help protect your tent and offer some relief from the sun.

2 Don't set it and forget it. Tents can make fun backyard clubhouses, but pitching your tent and leaving it out for long periods of time can seriously reduce the life of your gear. Set up your tent only when camping to prevent extended sun exposure.

3 Apply UV-protectant spray. Just like our skin needs UV protection, so do our tents. Applying specialized UV-protectant sprays can help prolong the fabric's life and preserve waterproof coatings.

4 Store it out of the sun. Stash your tent in a cool, dry place away from sunlight when not in use. Avoid storing your tent near windows. Long-term exposure to even indirect sunlight can degrade your tent's fabric.

Alice Jones Webb is a freelance writer, avid bowhunter, happy camper and freethinking rebel. She lives in rural North Carolina with her nonhunting husband, a co-dependent dog and a well-stocked chest freezer.

Coleman
Coleman

NATU
RELIAN
SCHOOL

Having a leather belt, sheath, or sharpening stone cover ensures you always have a knife strop in the field.

FIX IT FAST

Repairing gear on the go

BY CRAIG CAUDILL

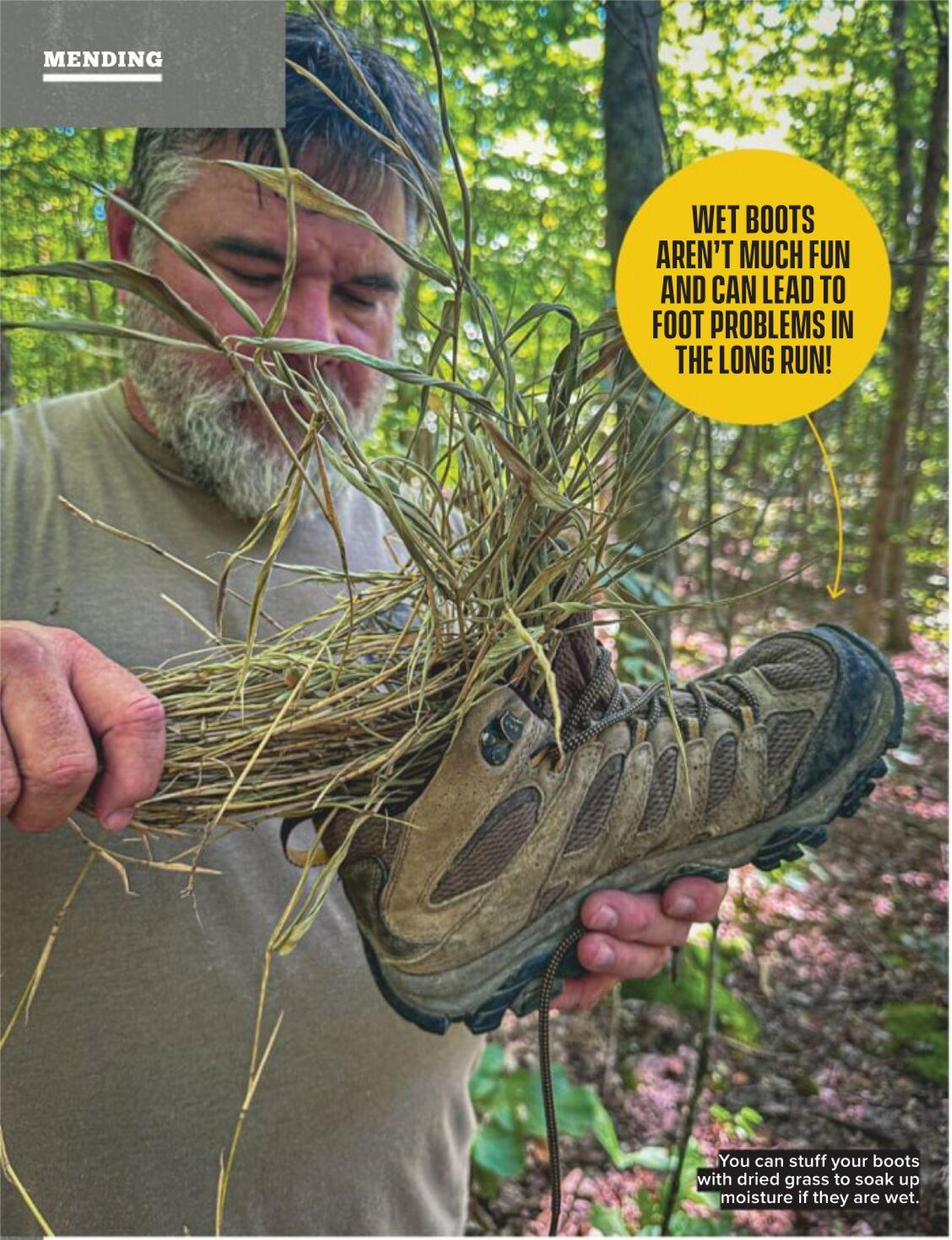
A FEW YEARS AGO DURING A SURVIVAL TREK, I HAD AN EXPERIENCE THAT DROVE HOME THE IMPORTANCE OF BEING PREPARED FOR THE UNEXPECTED. I WAS PROCESSING WOOD NEAR MY SHELTER WHEN A SUDDEN WIND BLEW MY AIR-FILLED SLEEPING PAD INTO THE FIRE.

A large hole was burned through the pad in just a few seconds, rendering it useless. Thankfully, this was just a training exercise, so my life wasn't on the line. But it was a stark reminder that in the wilderness, your gear is your lifeline. Whether you're a hiker, camper or survivalist, your equipment is crucial to your safety and success. Even the most durable gear can fail or sustain damage, especially under harsh outdoor conditions.

From my experience and countless hours in the field, I've learned that maintaining and repairing your gear is a critical skill that can make the difference between a successful adventure and a potentially dangerous situation. In this article, we'll explore the best practices for keeping your gear in top shape when you're far from the comforts of home.

INSPECTIONS BEFORE A TRIP

Before heading out into the field, one of the



WET BOOTS AREN'T MUCH FUN AND CAN LEAD TO FOOT PROBLEMS IN THE LONG RUN!

You can stuff your boots with dried grass to soak up moisture if they are wet.

most important steps is to inspect all your gear thoroughly. This includes everything from your backpack and shelter to your cooking equipment and first-aid supplies. Look for signs of wear and tear, such as fraying seams, cracks or rust. Pay particular attention to high-stress areas, such as backpack straps, tent poles and knife sheaths, as these are more likely to fail under pressure. I am not a fan of the flat-lay craze on social media, where all of the gear is set out on the floor in nice little rows, but its origins are sound. It was started by many military veterans laying out gear for missions. It is a widespread practice in those circles and a valuable personal practice.

By identifying potential problems before you leave, you can make necessary repairs or replacements and avoid a crisis in the field. Additionally, pack a small repair kit tailored to your gear. This kit should include needle and thread, duct tape, zip ties, glue and spare parts for any specialized equipment. A well-stocked repair kit can be a lifesaver when you need to make quick fixes in the wild.

ROUTINE MAINTENANCE IN THE FIELD

Once you're in the field, regular maintenance of your gear is essential to keep it functioning correctly. Even minor issues can escalate quickly outdoors, where dirt, moisture and heavy use can take a toll on your equipment. Here are some essential maintenance tasks to perform regularly.

✖ **Cleaning** Keep your gear clean to prevent dirt, grit and debris from causing damage. For example, shake out your tent and sleeping bag to remove any dirt or moisture that could lead to mold or wear. Hanging my sleeping bag and pad is one of the first things I do when I get up in the mornings. Clean your cooking equipment thoroughly after each use to avoid attracting wildlife and to prevent food residue from damaging your pots and pans.

✖ **Drying** Moisture is one of the biggest enemies of outdoor gear. Whether it's rain, sweat or condensation, moisture can lead to rust, mold and fabric deterioration. Make a habit of drying out your gear whenever possible. Hang wet clothing, tents and sleeping bags to dry immediately. If it's sunny, use the sun's rays to help with the drying process. One method for drying wet boots is to remove the insoles so they can dry more quickly, then place dried grass in the boots to soak up moisture inside the boot. Once the grass is full of moisture, I replace it with more. This works surprisingly well.

Lubrication Keep moving parts, such as knife hinges, zippers and tools, well lubricated to prevent rust and ensure smooth operation. A small tube of multipurpose oil or even a few drops of cooking oil can work in a pinch. Regularly check and lubricate these parts to keep them in good working order.

Protection Protect your gear as much as possible from the elements. Use waterproof covers for your backpack, store delicate items in dry bags and avoid exposing your equipment to prolonged periods of direct sunlight, which can cause materials to degrade. I use silicone spray on all my tents, hammocks and water-resistant packs.

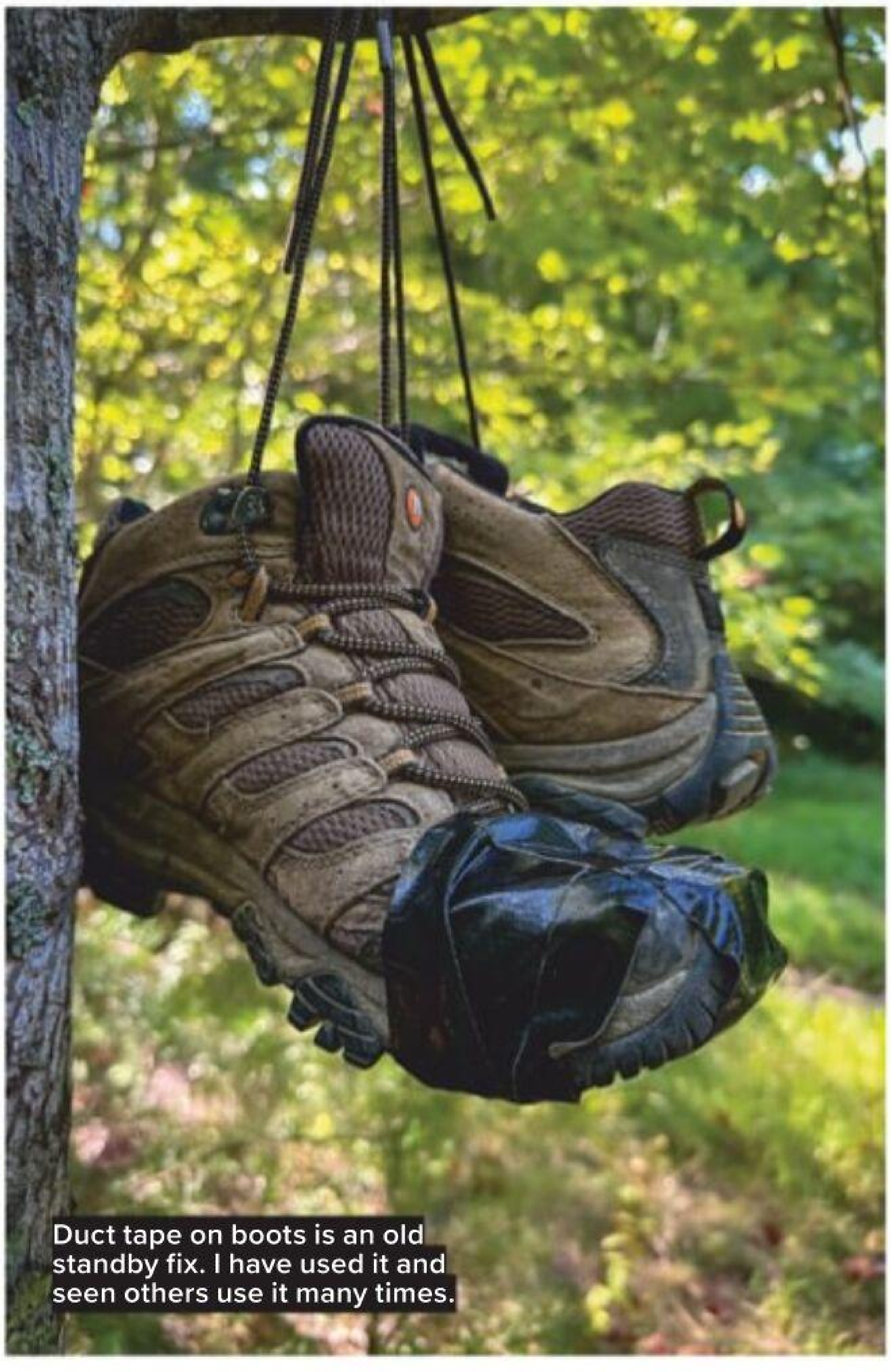
CLEANING YOUR GEAR AFTER EVERY OUTING WILL GO A LONG WAY TOWARD KEEPING IT IN GOOD CONDITION AND READY FOR THE NEXT ADVENTURE.

COMMON FIELD REPAIRS

Despite your best efforts, gear can and will break when you least expect it. Preparing to make repairs in the field is crucial for maintaining your safety and comfort. Here are some common gear failures and how to address them.

Torn Fabrics Tents, backpacks and clothing are susceptible to tears. A tear in your tent or clothing can be more than just an inconvenience; it can expose you to the elements. Use duct or fabric repair tape to

Hanging up a sleeping bag each day after use helps body moisture dry out.


Duct tape on boots is an old standby fix. I have used it and seen others use it many times.

seal the tear for quick repairs. If you have a needle and thread, sew the tear with a strong stitch, then reinforce it with tape for added durability.

Broken Zippers A broken zipper can render a gear unusable. If the zipper pull breaks, you can use a paracord, key ring or even a tiny piece of wire as a temporary replacement. For stuck or off-track zippers, gently work them back into place and lubricate the zipper with oil or a graphite pencil if it's sticking.

Snapped Poles or Sticks Tent poles, trekking poles and even makeshift walking sticks can break under stress. If a tent pole snaps, splint the broken section with a sturdy stick or spare tent stake and secure it with duct tape or cordage. For trekking poles, you can use the same method, or if the break is near the handle, use the remaining length as a shorter pole.

Leaky Water Bottles A leak in your water bottle can be a serious problem in the wilderness. If the container is plastic or metal, apply a layer of duct tape over the leak to create a temporary seal. For flexible containers, use a patch kit if you have one. In a pinch, you can melt a piece of plastic over the hole with a lighter, but be cautious to avoid damaging the container further. I also keep some flexible and bendable glue in my repair kit.

TOOLS OF THE TRADE

The right tools can make all the difference when you need to repair your gear in the field. Here's a list of essential items to include in your repair kit:

Duct Tape is the ultimate multipurpose repair tool. It can be used to patch holes, splint broken poles and as makeshift bandages. I have used it numerous times to patch the tarps used in our courses.

Needle and Thread Strong, durable thread is essential for sewing torn fabrics and repairing gear.

Zip Ties Lightweight and versatile, zip ties can be used to secure gear, replace broken buckles and more.

Multipurpose Tool A good multitool with pliers, a knife and screwdrivers is invaluable for making a variety of repairs. I like my multitool to have needle-nose ends for holding small items for sewing, pulling needles through and even pulling ticks when needed.

Superglue is ideal for quick fixes on small items and for bonding materials together. Not all superglues are the same. One more modern product is superglue gel. It is more flexible and less rigid than other options. I have found typical superglue cracks and breaks after dries, so this gel is more advantageous for field repair.

Spare Parts If your gear includes specialized components like buckles or clips, carry a few spares in your repair kit. This is usually overkill in my regular kit setup, but I have a spot for that in my home workshop.

TUFF POSSUM GEAR
COGHLAN'S
Fabric Repair Patches
Fabric Repair Patches
Patchs de réparation de tissu
Seam Seal
Scelle-couture
59 ML / 2 FL OZ
GORILLA
SUPER GLUE GEL

A good repair kit should be easy to find in your bag and contain all the necessities to patch, fix and secure broken gear.

Blown-Out Boots Your boots are one of your most critical pieces of gear. If your boots start falling apart, use duct tape to hold them together temporarily. Place tape over the front of the toe, then wrap around the toe box to secure it well.

As much as you may want to push through and continue your adventure, there are times when it's safer to turn back. If your gear suffers a catastrophic failure that you can't repair in the field, or if multiple items fail at once, it may be time to consider heading back home whenever you can. Your safety should always be your top priority, and while it can be disappointing to cut a trip short, it's better to be safe than sorry.

Maintaining and repairing your gear in the field is essential for anyone who spends time outdoors. By inspecting your equipment before your trip, performing regular maintenance in the field and being prepared to make repairs on the go, you can extend the life of your gear and ensure that it's ready to support you on your adventures. The wilderness is unforgiving, and your gear is your first line of defense—take care of it.

Atsko Silicone Water-Guard spray is my go-to choice for spray to help make packs, bags and other items water-resistant.

Cleaning equipment after use makes gear last much longer and makes the fabrics and materials more resilient.

Craig Caudill is the Director of Nature Reliance School and a bestselling author. You can train with him from anywhere in the world through his online school or in-person coursework. Check him out at naturereliance.org.

IT MIGHT BE HARD TO BELIEVE, BUT A SHARP KNIFE IS MUCH SAFER THAN A DULL ONE!

TUFF POSSUM GEAR
EZE-LAP DIAMOND HONE & STONE
USA
FINE
KPL
CAMELLIA
KNIFE OIL
ALL-NATURAL TSUBAKI RUST PREVENTIVE
virgin-pressed organic camellia seed oil
MADE IN USA
TRADE M
ENGLAND

The author gave a worn woods chopper a spa makeover, removing rust and applying KPL Camellia Knife Oil for weather protection.

KEEP 'EM SHARP

Maintain your knives for maximum efficiency

BY REUBEN BOLIEU

KNIFE MAINTENANCE IS CRUCIAL FOR ENSURING THE LONGEVITY AND PERFORMANCE OF YOUR TOOLS. PROPER CARE AND UPKEEP HELPS RETAIN THE SHARPNESS OF THE BLADE, PREVENTS CORROSION AND ENSURES SAFE USAGE.

Regarding maintenance, folding knives require additional attention due to their moving parts. It's essential to regularly lubricate the pivot point and keep the blade and handle clean to ensure smooth operation. On the other hand, fixed-blade knife maintenance focuses on regular cleaning, sharpening and storage to prevent rust and maintain their edge.

SHARPENING BASICS

Knife sharpening is a fundamental skill any knife owner should be able to handle. The basic principle involves removing a small amount of metal from the blade to create a new, sharp edge. Various tools are available, including sharpening stones, honing rods and electric sharpeners. When sharpening a knife, it's essential to maintain a consistent angle between the blade and the sharpening surface. Using a lubricant such as water or oil on the sharpening stone can also help achieve better results. Regular sharpening not only ensures a sharp edge for efficient cutting, but also extends the life of the knife.

Assemble a compact kit with must-have gear like sharpeners, lubricants, waxes, a cleaning cloth and swabs.

TECHNIQUES

When sharpening a knife on a stone, there are several techniques you can use to hone the blade. One standard method uses circular motions to grind the edge evenly. Another involves using a jig to stabilize the angle of the blade against the stone, ensuring consistent sharpening. Stropping, which consists of running the blade across a leather strop coated with a fine abrasive compound, can refine the edge and achieve a razor-sharp finish. Each of these techniques can help maintain the sharpness of the blade and ensure it performs its cutting tasks efficiently.

FOLDING KNIFE MAINTENANCE

When it comes to maintaining a folding knife, there are a few key steps to keep it in top condition. First, cleaning is essential for preserving the functionality and appearance of the knife. This involves wiping the blade with a clean cloth and using a small brush to get into the hard-to-reach areas.

Lubrication is crucial for ensuring smooth operation. Applying a small amount of oil to the pivot point and blade helps to prevent rust and corrosion.

I recommend Knife Pivot Lube's (KPL) Original, a synthetic oil made for knives. The 14 mm application needle gets into tight spots. Apply it on all moving parts of the knife, such as detent tracks and bearings, and as a rust-preventive blade coating. Applying lubrication for knife disassembly, cleaning and maintenance is vital.

Regular checks and maintenance of screws or pivot points are also necessary. Over time, these components may loosen, affecting the knife's performance. Inspecting and tightening them as required to maintain optimal functionality is essential. Last, it's crucial to examine the knife for worn-out parts. These could include the blade, handle or other components subject to wear and tear. Identifying and replacing these parts when necessary is key to ensuring the knife remains safe and effective.

By following these maintenance guidelines, knife owners can prolong the life of their folding knives and ensure they remain reliable tools for years to come.

FIXED-BLADE KNIFE MAINTENANCE

First and foremost, regular cleaning is essential. A clean cloth can wipe down the blade, while a small brush is great for getting into difficult-to-reach areas. This helps prevent dirt and debris from building up, affecting the knife's performance.

Lubrication is another crucial aspect of maintenance, but different from folders. There are no moving parts on fixed-blades. However, many of these types of knives

KPL
KNIFE SHIELD
OPINEL

KPL offers washable and reusable swabs with ultrafine microfiber bristles that act like magical magnets, effectively grabbing dirt and dust.

KPL
KNIFE SHIELD
KPL
ORIGINAL
OPINEL

The author used KPL Original pivot lube on these stellar tools to elevate their performance. The needle applicator proved useful for pinpoint access.

LUBRICATE ALL MOVING PARTS SO THAT THEY MOVE WHEN YOU WANT THEM TO!

WICKED WAX IS AN EXCELLENT ADDITION TO EVERY KNIFE SHARPENING KIT!
WICKED CLEAN
WICKED WAX

Wicked Wax excels at cleaning and enhancing carbon steel blades, leather sheaths, wooden utensils, wood kuksas and wooden handle scales on premium tools.

are made from carbon steel. Applying a small amount of oil to the blade helps prevent rust and corrosion, mainly if the knife is used in outdoor or humid environments. This simple step can go a long way in preserving the longevity of your knife.

I recommend using KPL Knife Shield for this. The formula forms a thin layer of corrosion-suppressing molecules on metal surfaces. It then disrupts the galvanic corrosion process by altering corrosion potentials to higher values, thereby preventing the dissolution of metal ions essential for forming rust and patina.

A sharpening stone or tool can help keep the blade in optimal condition, ensuring it performs cutting tasks efficiently and safely. Finally, inspecting the knife regularly and replacing worn-out parts, such as the handle or sheath, is essential.

CLEANING THE RUST

I keep a large Helm Forge parang in the woods, hidden in a log in a camp I frequent. It's about 60% protected. However, moisture is imminent. The blade has a Cerakote finish, yet the exposed cutting edge always had some rust. Regular use will prevent it from forming. However, I don't always have a use for that blade, so it gets its share of neglect.

Rust removal was addressed first. I started with my small maintenance kit and a piece of carborundum stone for tools and machetes. I used the coarse side with medium pressure on the bevel, making circles with it. This knife started with a flat grind, but this technique gave it a convex, which is excellent for chopping tools. I moved on to a medium and fine flat EZE-LAP Diamond Hone & Stone—in circles again.

At this point, most of the rust was removed and the blade was sharp. Before applying the rust preventive, I finished it on a Sagewood Gear Pocket Strop from Tuff Possum Gear. I have been using KPL Camellia Oil. This oil is favored for its ability to protect against rust and pitting while creating a tasteless coating on metal surfaces and forming a barrier against moisture and oxygen. To apply the oil, I sprayed it onto the knife's surface and then gently wiped it, leaving a thin, protective layer on the blade.

EZE-LAP
DIAMOND
HONE & STONE
USA
FINE
MEDIUM
PAWBUSHCRAFT

Make a simple sharpening and honing kit to complement your other maintenance kit accessories.

SHEATH MAINTENANCE

Start by wiping down the sheath with a damp cloth to remove dirt or debris. Avoid using harsh chemicals or soaps that can damage the leather. After cleaning, apply a leather conditioner to keep the leather supple and prevent it from drying out and cracking. I use Wicked Wax for leather sheaths and wood handles. Wicked Wax is 100% food-safe and made with all-natural ingredients. It's excellent for making metal rust-resistant and sealing leather without making it slippery.

A simple rinse with soap and water should do the trick for Kydex knife sheaths. Be sure to thoroughly dry the sheath to prevent any moisture from causing rust on the knife blade. Regular cleaning and conditioning will help extend the life of leather and Kydex knife sheaths.

KIT AND GLOVES

Put together a small kit with the basics. This way, you have everything you need in one place. You'll be ahead of the game if you can assemble a kit that covers both folders and fixed knives.

Be sure to include sharpeners, lubricants, waxes, a cloth, some swabs, a rag and a pair of work gloves. Another idea is to make a sharpening/honing kit with larger pucks and stones and a separate kit with the oils, waxes and stuff.

Regular maintenance is crucial. By following these steps, you can ensure that your knife remains in excellent working condition for years to come.

PATINA 101

Creating a forced patina on a carbon steel knife is a process that can help protect the blade from rust and corrosion while giving it a unique and attractive appearance. To make a forced patina, you can use various household items like mustard, vinegar or even a potato. First, clean the blade thoroughly to remove any residue. Then, apply the substance of your choice to the blade and let it sit for a period of time, periodically checking the progress. Once the desired patina is achieved, rinse off and thoroughly dry the blade. Finally, you can apply a thin layer of oil to protect the newly formed patina.

STAINING ON PURPOSE

Add some natural color to your projects

BY CHRISTOPHER NYERGES

IN THE PAST, ALL DYES AND PIGMENTS CAME DIRECTLY FROM NATURE. DYES AND PIGMENTS WOULD BE USED TO COLOR CLOTHES AND FABRICS, MAKE INK, AND PAINT VARIOUS OBJECTS, SUCH AS POTTERY, ARCHERY BOWS AND MORE.

This can be a great way to help you either blend in or stand out, whichever your goal may be.

By cinching parts of the fabric, you can create interesting patterns with the dyes used.

Much of the diversity of colors had to do with whatever was locally available. Today, this is largely a lost art, though there has been a resurgence of interest in natural dyes. When I was still a teenager, I experimented with dyeing fabrics, such as T-shirts, but I used mostly Rit dye from the fabric store. Slowly, I became more and more interested in the use of plants (and other natural materials) for making dyes and pigments.

The various natural colors come from soils, minerals, clays, mushrooms and different parts of plants, including leaves, roots, fruits, nuts and such. These raw materials are used to make dyes for fabrics, ink for writing or for tattoos, colors for pottery, paint for murals or various objects and more. Each raw material will have unique idiosyncrasies, and every type of fabric you are dyeing will also have specific concerns.

Let's go over the procedure for dyeing fabric. There are many possible variations to each of these steps, but we'll walk through the basics. Remember to only dye natural fabrics since synthetics do not hold the colors well. Work with 100% natural fibers such as cotton, wool, linen, hemp and possibly silk.

PROCESSING THE FABRIC

The first step is to "scour" the fabric to remove any waxes or chemicals so the fabric will be able to absorb the dye. Scouring can be done in a washing machine, by hand or simply by soaking (or soaking and boiling).

For cellulose materials, like cotton, use soda ash for scouring. Sometimes, cream of tartar is used in this process, and master dyer Amy Stewart often uses a neutral soap, like Dr. Bronner's baby soap, to wash or scrub her materials. Put water in a pot, add about 3 tablespoons of soda ash, and boil for about two hours. The water will become milky-looking or even brownish if you're using a raw material like linen or hemp.

For wool, just put it in a pot of water, get it warm (but not so hot that it shocks the wool and felts it), let it sit for a couple of hours at least, and stir it occasionally.

Once you're done, you'll need to thoroughly rinse the fabric and let it dry.

MORDANT

The mordant process allows the dye to be "fast" so that it will not fade or wash out in the first washing.

There are many possible mordants, which can depend on the fabric used. The process is to soak the fabric in the mordant first and then dye it afterward.

Stewart uses alum sulfate for wool and alum acetate for silk. She points out that symplocos is another mordant. It comes from an Indonesian tree whose leaves are naturally rich in alum; it's made into a powder and used for protein or cellulose fibers.

Stewart typically adds about 3 tablespoons of alum sulfate in a pot of water, heats it to a simmer—being careful with wool—and lets the fiber soak in there for two to 24 hours.

Other possible mordants include 1 ounce of alum for each 1 1/2 quarts of water and ¼ ounce of washing soda added to cotton. For wool, alum or chrome (potassium dichromate) may be used. Mix 1 ounce of alum with each gallon of water for each quarter pound of wool.

For dyeing wool, vinegar has been used in the ratio of ½ gallon of vinegar to every 2 gallons of water.

Many mordants are available from fabric shops. Some may alter the color of the dye or brighten it. In the old days, lye would be obtained by pouring water through wood ashes, though I do not know any dyers who do this today. Again, many variables with mordants exist, such as the type of material to be dyed. I strongly recommend that you seek out someone who does natural dyeing and make some inquiries as to what methods they use.

Stewart notes that you don't need mordanting when using products rich in tannins

THESE SORTS OF ADORNMENTS ADD A PERSONAL TOUCH AND A BIT OF CLASS TO GIFTS!

You can dye different lots of yarn or other cordage.

INKS AND PAINTS

To make simple inks and paints, you can crush the plant material, charcoal or clay, sift it, and mix it with oil or egg whites. In some cases, adding water will make a suitable ink or paint.

In his book *Earth Pigments and Paint of the California Indians*, Paul Campbell discusses how rock art paint was made in the California desert and how it lasted so many centuries. Campbell describes the many colors used for rock art and painting arrows, bows and even clothing. For the paints to last, the Native people crushed the wild cucumber plants' seeds and mixed them with various ochres, clays or other items.

Plant material, charcoal or clay can be used to make ink and paint.

for dyeing, like oak galls. Also, mordanting is unnecessary when using indigo for dyeing because its molecular structure makes it adhere directly to the fabric, and black walnut is rich in tannins, so the fiber does not require a mordant.

DYEING

You make your plant-based dye by soaking a full pot of the plant material in water and simmering for about an hour or so, stirring occasionally. The more material you add to the pot, the richer the color will be. Then, remove the pot from the heat and let it sit for about eight hours. Strain out the plant material, then return the liquid to the pot and heat it up again.

Next, add the fabric or yarn to be dyed. Let the fabric simmer for about two hours and stir it occasionally to distribute the dye evenly. Turn off the heat and let it sit for about eight hours, then thoroughly rinse the fabric and let it dry.

SOURCES FOR COLORS

As you might imagine, different plants will yield different colors. Here are some short lists to help you identify plants in your area that can help you achieve the shade you desire.

Yellow

- Goldenrod flowers
- Willow leaves
- Pear leaves
- Chamomile flowers
- Agrimony leaves
- Osage orange wood shavings
- Burdock leaves
- Sagebrush
- Eucalyptus bark

Red

- Whole beets
- Birch, inner bark
- Sorrel stalks and roots
- Sandalwood, dried and powdered
- Pomegranate fruit
- Pokeweed berries
- Sassafras root bark
- Cochineal, with a citric acid afterbath

Green

- Nettle leaves
- Mullein leaf
- Plantain leaves and roots

Blue

- Elderberries
- Indigo leaves
- Red bearberry leaves
- Bilberries

Brown

- Onion skins
- Oak bark, acorns or galls
- Walnut husks
- Coffee grounds

Purple

- Pokeweed berries
- Raspberries
- Dandelion roots
- Red cabbage
- Hibiscus petals
- Cochineal, from the prickly pear cactus, with an iron afterbath
- Indigo (Note: There's no need to use a mordant with indigo)

This is by no means a complete list. Once you try some of these common sources of dyes, consider experimenting. Most people who start down this path will begin with materials abundant in nature near where they live. Onion skins, acorns, walnut husks, elderberries and nettle leaves are all common nationwide and make good candidates for starting your experiments with dyes.

YOU CAN EVEN TURN THIS INTO A PROFITABLE HOBBY WITH A LITTLE WORK!

Learn about your regional mushroom & lichen dye palettes
Mycopigments.com

The diversity of colors shown here were all produced from mushrooms.

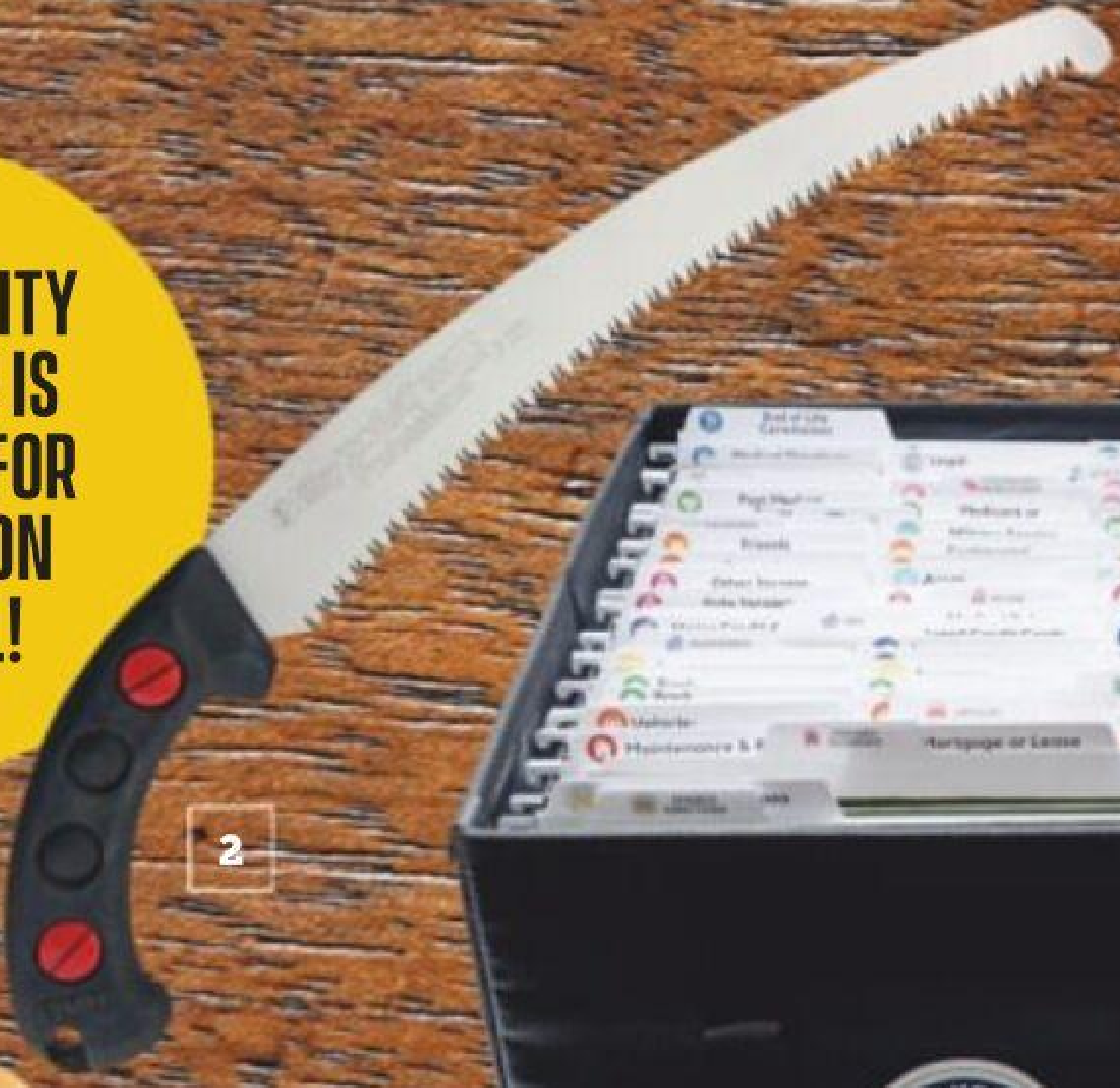
CHAPTER 4

EQUIPMENT

HUMANS INVENTED TOOLS FOR MANY REASONS– INCLUDING THAT THEY'RE FUN TO PLAY WITH!

NEW PRODUCTS

GOOD-QUALITY FOOTWEAR IS ESSENTIAL FOR COMFORT ON THE TRAIL!



1

CALIBER 6 BOOTS

Whether you're tackling chores or heading to the hills, these boots are ready to go. They feature a leather and abrasion-resistant poly upper with 5.11's Force Foam in the heel for cushioning. There's an Ortholite insole over an ASTM-rated slip- and oil-resistant full rubber outsole. These boots are available in Tan (shown) or Bark (dark brown). Comfort and durability—all in one handsome boot.

- **MSRP** $110
- **URL** *511tactical.com*

2

SILKY SAW ZUBAT

With a heavy-duty 13-inch curved blade, this saw is ideal for all pruning tasks. The curve means greater cutting speed with less effort. A comfortable molded-rubber handle keeps you working all day long. It comes with a scabbard that the saw locks into when not in use. Its one-piece construction means there's nothing to fall apart.

- **MSRP** $100
- **URL** *dlttrading.com*

3

NOKBOX FIREPROOF

If you want to get your affairs in order so that your family will know where to find everything, this is the perfect solution. The Nokbox has 67 color-coded files, each clearly labeled, along with 72 double-sided instruction sheets. There's also a zippered key pouch for spare keys to vehicles and property. Everything is contained in a fire- and water-resistant box.

- **MSRP** $169
- **URL** *thenokbox.com*

The latest and greatest gadgets and goodies

BY BSG STAFF

4

5

IT HAS A TON OF USES, INCLUDING CAMOUFLAGING YOUR FACE WHEN HUNTING!

6

4

LIGHTNING 45

This is a refined, lightweight pack that's suitable for any multiday adventure where minimal weight and functionality are required. The roll top maximizes weatherproofing and allows expansion of the main compartment. Side pockets are made of elastic fabric and can be used to store water bottles or trekking poles. Zippered pockets on the hip belt offer even more storage space.

- **MSRP** $210
- **URL** *expedusa.com*

5

FRONTIER PANT

The Frontier Pant was engineered to be the perfect combination of function, fit and durability. They feature a warm but breathable four-way stretch fabric with side zip vents, generous reinforcements, a truly versatile pocket system and a dialed-in athletic fit for unrestricted mobility. You'll be able to carry all of your EDC gear without having it weigh you down.

- **MSRP** $209
- **URL** *bornprimitive.com*

6

HOO-RAG

This incredibly versatile bit of clothing can be worn in a variety of ways, including as a face mask, neck gaiter, headband, beanie and more. It is made of 100% moisture-wicking polyester microfiber. The Original Hoo-rag is 19.5 inches long and 9.5 inches wide, and the extra-large is 19 inches long by 10.5 inches wide. It comes in a large range of patterns. Shown is the Mossy Oak Obsession print.

- **MSRP** $18
- **URL** *hoorag.com*

7

8

KEEP YOUR CORDAGE TANGLE-FREE AND READY TO DEPLOY, NO MATTER WHERE YOU'RE HEADED!

9

7

WX FOUNDER

With maximum eye protection and a bold, standout silhouette, these sunglasses are perfect for anyone who wants to make a statement while also seeing clearly and safely on bright, sunny days. The robust build and removable side shields make them ideal for outdoor adventures. A lightweight frame and dual-injected rubber temples make for a comfy feel for hours on end.

- **MSRP** $206
- **URL** *wileyx.com*

8

MICRO CORD

This is the ultimate rope and cord management tool. You can quickly pull off the length of cord you need and cut it with the built-in blade. It comes preloaded with 125 feet of Micro Cord. This cordage is thin but strong, and is perfect for a huge range of uses. The neon green color means you'll be able to see it even in dim light, and it's also available in other colors to suit your specific needs.

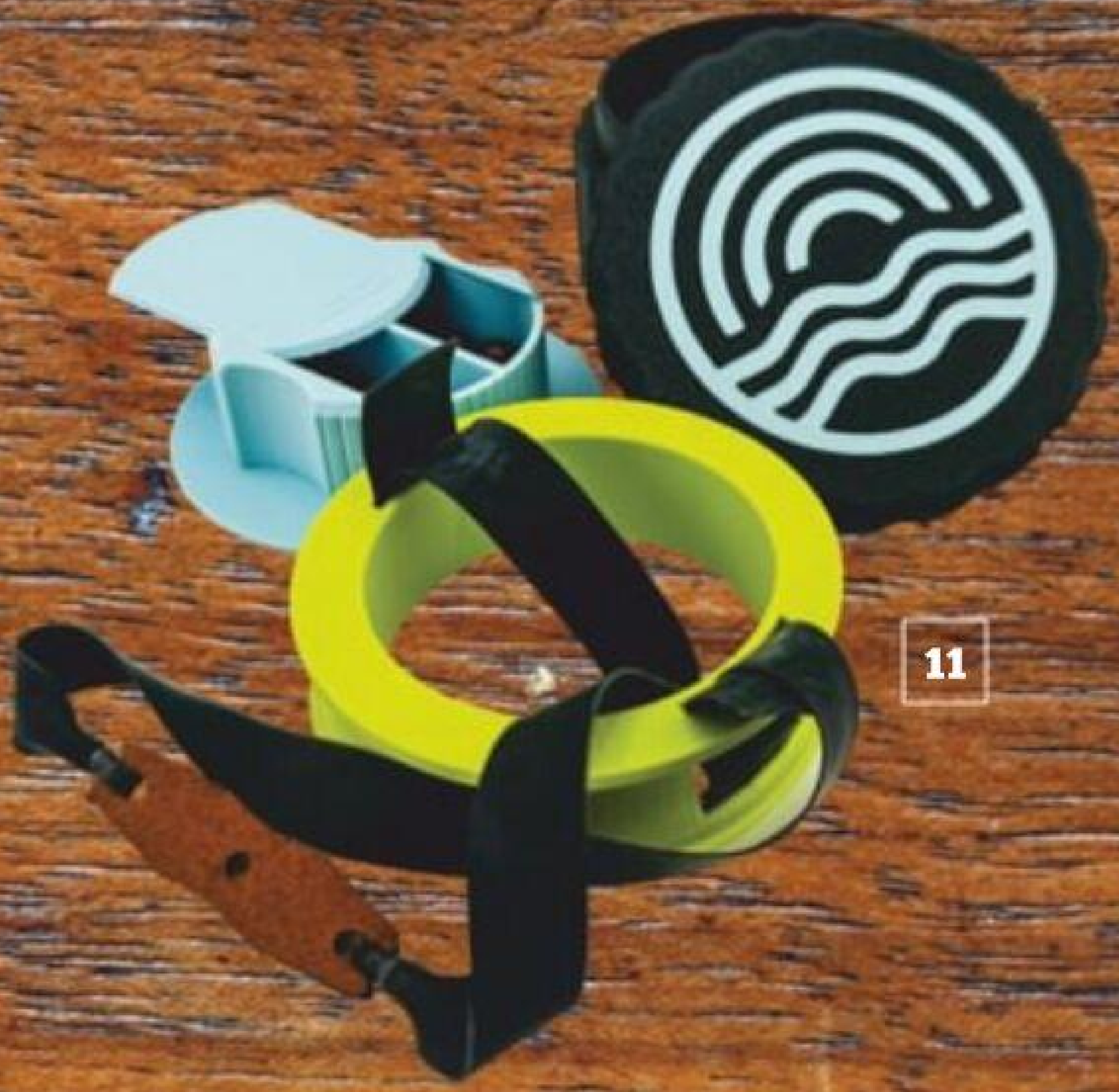
- **MSRP** $11
- **URL** *dlttrading.com*

9

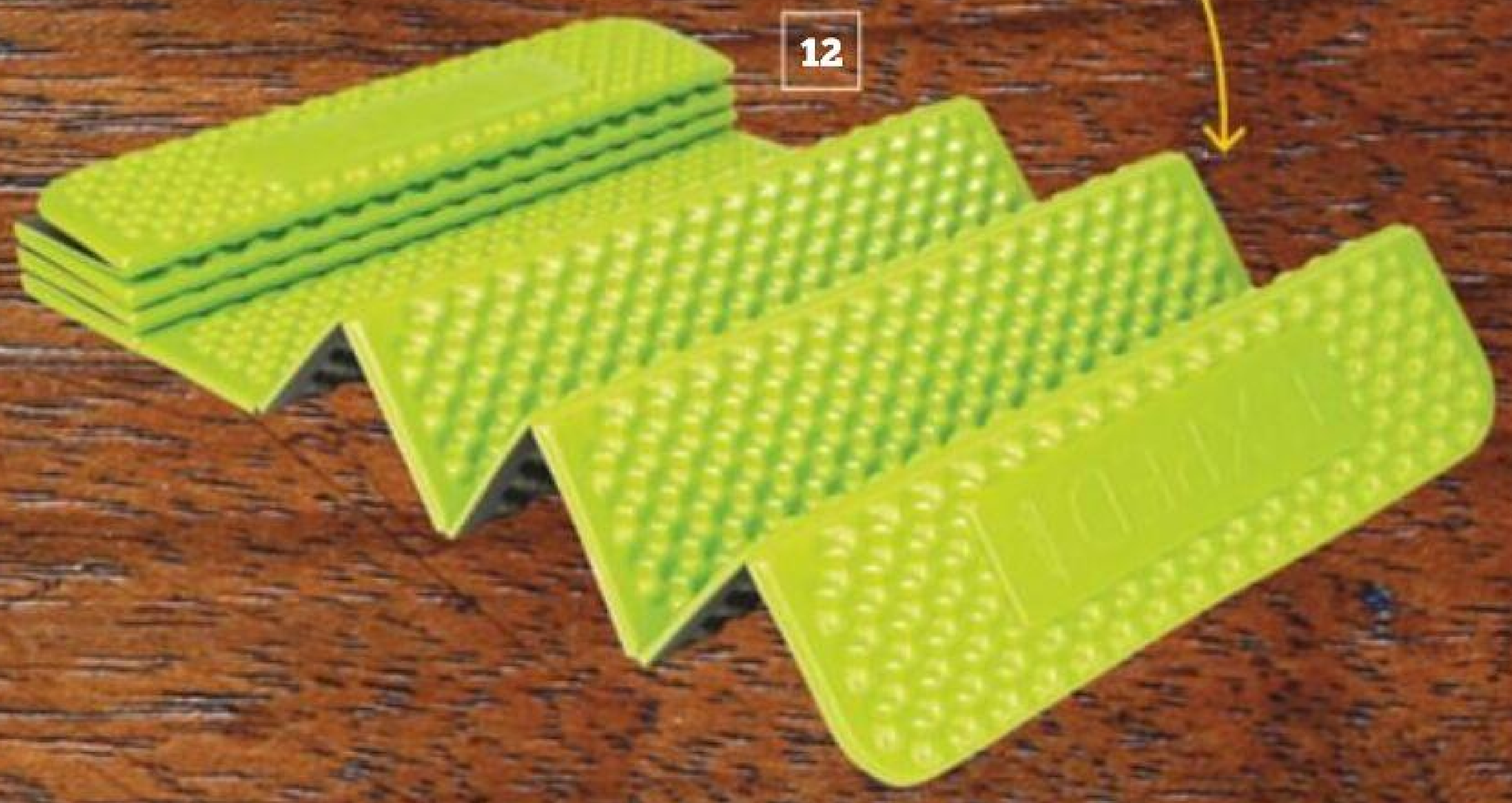
CLOUDSTRYKE PACK 10L

This 10L ultralight backpack is engineered from the ground up for maximum comfort. The adjustable torso system with low-profile mesh shoulder straps features ½-inch increments, dual sternum straps and a side compression system for a custom fit. A ventilated back panel delivers support and comfort. There's a cinch drawstring at the top to keep contents secure.

- **MSRP** $100
- **URL** *511tactical.com*



SLEEP LIKE A BABY ON THE TRAIL WITH THIS COMFORTABLE, EASY-TO-PACK FOAM MAT!



10

XPAC EXTREME PEN POUCH

If you want to protect your writing implements or other small tools, look no further. This pouch is the epitome of durability and style. It's water-resistant and will hold up to the toughest challenges. This is a great option for your EDC pack to keep everything exactly where you want it, so you can just grab and go. The bright color means you can find it when you need it.

- **MSRP** $15
- **URL** *countycomm.com*

11

GOSHOT POCKET SLINGSHOT KIT

Whether you're an experienced pro or simply looking for a fun hobby, this is just the ticket. The distinctive circular shape enhances grip and balance, allowing for a steady, precise shot. It's small enough to fit into any pocket, making it an ideal companion for any outdoor trek. It includes clay slingshot ammo.

- **MSRP** $30
- **URL** *crystalcreekgear.com*

12

FLEXMAT

This is a rapidly deployable, lightweight and versatile closed-cell foam mat that will help you sleep through the night. It can be used as a minimalist mat for three-season use, or in tandem with an air mattress, giving you additional insulation from the ground. It unfolds quickly and has plenty of flex when it's packed up, ensuring a small and tidy load when attached to your bike, kayak or backpack.

- **MSRP** $40
- **URL** *expedusa.com*

STAR SCARS

Battle the damaging effects of the sun

BY MICHAEL D'ANGONA

THE SUN IS A TRUE FORCE OF NATURE. IT PROVIDES NEEDED WARMTH AND LIGHT FOR BOTH PLANTS AND ANIMALS TO SURVIVE AND THRIVE IN THE WORLD. IT BRIGHTENS A PERSON'S DAY AND CAN LIFT SULLEN SPIRITS AND MAKE PEOPLE SMILE.

However, ironically enough, the sun has a dark side, and that's its ability to burn skin, produce heat stroke and cause dehydration for men, women and children if they are exposed to its brutal intensity. So, protection from the brilliant star in the sky is an absolute must. From lotions and ointments, broad hats and coverings, to instant shade producers, there are numerous options to battle the sun's relentless power.

WEARABLE MEANS

The first line of defense against the sun's powerful and damaging rays is the clothing that you wear. This includes not only shirt and pants, but head coverings, neck protection and footwear as well.

Sunscreen should be applied every two hours as it fades and loses potency.

IT DOESN'T NEED TO BE A SCORCHING-HOT DAY IN ORDER FOR THE SUN TO BE AN ISSUE. YOU CAN GET BURNED EVEN WHEN IT IS COOLER OUTSIDE.

Certain models of sunglasses protect from UV light. Be sure to read the features before you buy.

MANY PEOPLE KEEP AN ALOE VERA PLANT IN OR NEAR THE KITCHEN IN CASE OF BURNS!

Aloe can help ease the burn after too much sun exposure.

First and foremost, not all clothing protects to the same degree. So, going out and buying just anything that catches your eye won't do, as well as just using what's in your closet. Yes, it can protect to a degree, but some garments are much better than others. Dark colors will shield your skin exponentially more than light colors. For example, the common white T-shirt (that almost everyone owns) offers a sun protection factor of only around 7, while a black, thicker shirt can offer an SPF of 100 (the highest on the scale)—that's a significant difference. Loose-weave clothing, though airy and cooling in warmer temperatures, allows the sun to hit exposed skin, rendering this type of clothing poor sun protection.

Most people may not realize that wet clothing (like after an unexpected sun shower) gives less protection than dry clothes, so a change of clothing should always be available when out under the sun. Overall, lightweight, breathable fabrics that cover the most skin area (think: long sleeves and long pants) will keep skin exposure to a minimum and protect from the sun's light. Today, many manufacturers of outdoor clothing offer selections that have dyes or chemicals within the fabrics that absorb UV radiation (more on this shortly). It may take some research on your part to find these, but they are out there.

Hats come in all shapes and sizes. Choose one with a wide brim that covers your head, neck and ears. All-over protection is a must, as the sun's angle of attack shifts throughout the day. Avoid hats like baseball cap and visors, as they offer minimal protection—usually just your forehead and nose—while straw hats are equally bad, as they have holes or loose weaves that allows the sun to penetrate to your skin level.

As for footwear, unless you are in a warm climate, boots or outdoor shoes will probably be worn that offer ample protection. If you do wear sandals or "gladiator" style footwear, you'll need to apply sunscreen to any exposed skin.

OINTMENTS AND SUNSCREENS

"UV protection" is a phrase that is written about in magazines, discussed in television commercials, and constantly preached by your primary doctor or dermatologist, but what exactly does it mean? Simply put, UV is short for ultraviolet radiation, which is an invisible form of energy emitted from the sun down to your tender skin. Just the right amount will help the body produce vitamin D, while too much can cause sunburns and possibly skin cancer in the long term. Most people tend to get too much UV light when outside. This is even worse when trekking throughout mountainous terrain where altitude, the reflection from snow and even the time of year can increase a person's UV exposure.

SUNSCREEN IN THE WINTER?

Although sunscreen is typically associated with beach or pool activities, it truly is needed in the winter, and especially when snow blankets the ground around you. On a sunny day, snow can reflect up to 90% of UV radiation, so basically all parts of your exposed skin are susceptible to sunburn and skin damage. Additionally, people living or recreating at high altitudes are at risk because more UV radiation penetrates the thinner atmosphere. Protection is definitely needed, included face coverings and sunscreen (with a recommendation of SPF of 50 or higher, with water-resistant properties.)

Sunscreen and lip balm protectants are an absolute must. Broad-spectrum sunscreen is what you need, with an SPF at a minimum of 30. Be sure to apply every two hours, as they fade in effectiveness over time. Also, be sure your sunscreen is both water- and sweat-resistant, because most likely you'll be exerting yourself on your trek. Lip balm can sometimes be forgotten prior to heading outside. The lips need protection, too, as they can burn quickly under direct sun. Be sure to find a balm that offers UV protection and is not just intended for moisturizing. Lip balm, like sunscreen, should be applied often and should be water- and sweat-proof.

HELPFUL ACCESSORIES

There are a handful of items that can provide protection from the sun's pounding rays. Sunglasses can help to protect the eyes. The gold standard for eye protection is UV400. This should block nearly 100% of UV radiation.

An umbrella can not only keep rain off, but also provide shade. Do some homework and find one that has a UV coating that truly repels the harmful rays. These umbrellas can range in quality between feebly constructed to exceptionally durable, with extra features such as an all-steel frame construction, wind protection features and automatic opening. Since the umbrella will be used in the sometimes harsh outdoors, opting for the better-quality models will ensure protection in almost all weather conditions. The canopy diameter, as well as its closed size (most are about a foot long when folded), should be considered. You want one that will either fit in your pack or strap to the exterior of your backpack.

Tarps, ponchos and large bandannas can be used as improvised shade shields. These can be attached to overhead branches to provide temporary shade under intense rays. Again, dark colors protect better, as well as the materials offering UV protection.

Although it may appear to be overkill in terms of preparation when stepping foot outdoors under the sun, it's far better to be overprotected than underprotected. Sun damage at a minimum can cause steady irritation and pain, disrupting your time outside, and at its worst, can cause long-term skin damage.

Michael D'Angona is a freelance writer, author, martial artist and survival skill practitioner. He has published hundreds of articles encompassing such topics as self-defense, preparedness, product reviews and outdoor skills. He currently offers his books for purchase and magazine writing services at mjd-writersresourc.wixsite.com/my-site/.

Tarps can be strung above you and your campsite to provide protection from the sun's powerful rays.

TENTS FOR 2

Dependable shelters for Mother Nature's backyard

BY MICHAEL D'ANGONA

A small tent can be a great option for young children, giving them their own space when camping with the family.

ENJOYING NATURE IS A GREAT EXPERIENCE, AND IT'S EVEN BETTER WHEN YOU'RE WITH A COMPANION.

Having a second person to help navigate, assist with tasks or just to engage in conversation is wise when you're out hunting, fishing or hiking in nature's backyard. And after a long day, it's time for some shut-eye and a compatible shelter for two is an absolute must. Not too big to become a setup hassle and definitely not too small for a cramped night's sleep, the selections below will fit the "just right" category for you, your companion and your gear.

CONNECT TENT

When you want top quality, comfort and loads of features for your overnight outdoor shelter, look no further than the Tentsile Connect Tent. This elevated tent is fully waterproof, insect-proof, and features patented antiroll tech for a stable, comfortable night or two, or more. Cross-pole construction, no-see-um mesh, multiple storage pouches and pockets, and underfloor storage nets for big backpacks and gear are included in this impressive package. Go big, and go up, for your overnight sleeping option.

Specifications

- Antiroll technology for comfortable sleep time
- Convenient, four-door entry points
- Cross-pole construction for greater stability
- 5000 Hydrostatic waterproof rainfly
- Underfloor and secure storage compartments

MSRP $549
tentsile.com

C BAR 2 TENT

Ideal for three-season outdoor activities, the C Bar 2 Tent offers a spacious interior, front vestibule, an oversized ceiling pocket and sturdy construction to endure anything Mother Nature throws at you. Its exceptionally durable, waterproof fly keeps the rain out, with you cozy and comfortable inside. The C Bar 2 is easy to assemble and can go from carrying bag to full-size shelter in just a few minutes. Best of all, it weighs less than 4 pounds and includes an easy-to-carry stuff pack.

Specifications

- Spacious for two adults and gear
- Storm flaps for added protection
- Cross-pole design
- Oversized ceiling gear pocket
- Ready-to-pitch design for easy assembly

MSRP $250
bigagnes.com

GOLD CAMP UL 3 TARP

Skirting the line between a tarp structure and a full-fledged tent, this ultralight shelter allows for an easy, one-pole setup, plenty of interior room for two and gear, and protection from flying and crawling insects. Its polyester ripstop fabric stands up to the rigors of the wild, while still maintaining a light load for your pack. Reflective guylines and adjustable stakeout loops make getting some shut-eye faster than ever. An inner mesh and ground-level footprint pad are available (sold separately) if desired.

Specifications

- Ultralight, minimalistic design
- Multiple setup options
- Adjustable stakeout loops
- Reflective midbody guy-out points
- Single door with a storm flap and low vent

MSRP $180
bigagnes.com

DISTANCE TENT

Ingeniously designed using two trekking poles and four stakeout points, the Distance Tent erects easily when you need shelter fast. It's incredibly lightweight and can pack down to the size of a Nalgene bottle. Yes, it's the ultimate tent for the minimalistic traveler. The tent also features both a low and high vent for optimal ventilation, a headlamp pocket to illuminate the interior, and the durability to withstand Mother Nature's sometimes intense rage.

Specifications

- Ultralight for weight-conscious backpackers
- 30D polyester construction
- Utilizes trekking poles for setup
- Integrated headlamp pocket
- Packs down into a small footprint for easy carry

MSRP $300
blackdiamond equipment.com

Black Diamond

MOUNTAIN ULTRA 2P TENT

This economical two-person tent offers all the amenities of larger units, all the while not breaking the bank or sacrificing valuable features. Two adults, plus gear, will fit comfortably within its roomy interior, while enjoying optimal airflow thanks to its full mesh design. A full-cover rainfly keeps nature's downpours from seeping in, and its overall lightweight construction allows for easy carrying during your day hike. It's a solid overall choice for any outdoor duo.

Specifications

- Lightweight design
- Designed for optimal airflow
- Durable aluminum poles
- Roomy and comfortable interior
- Available in gray, red or orange colors

MSRP $140
tentongear.com

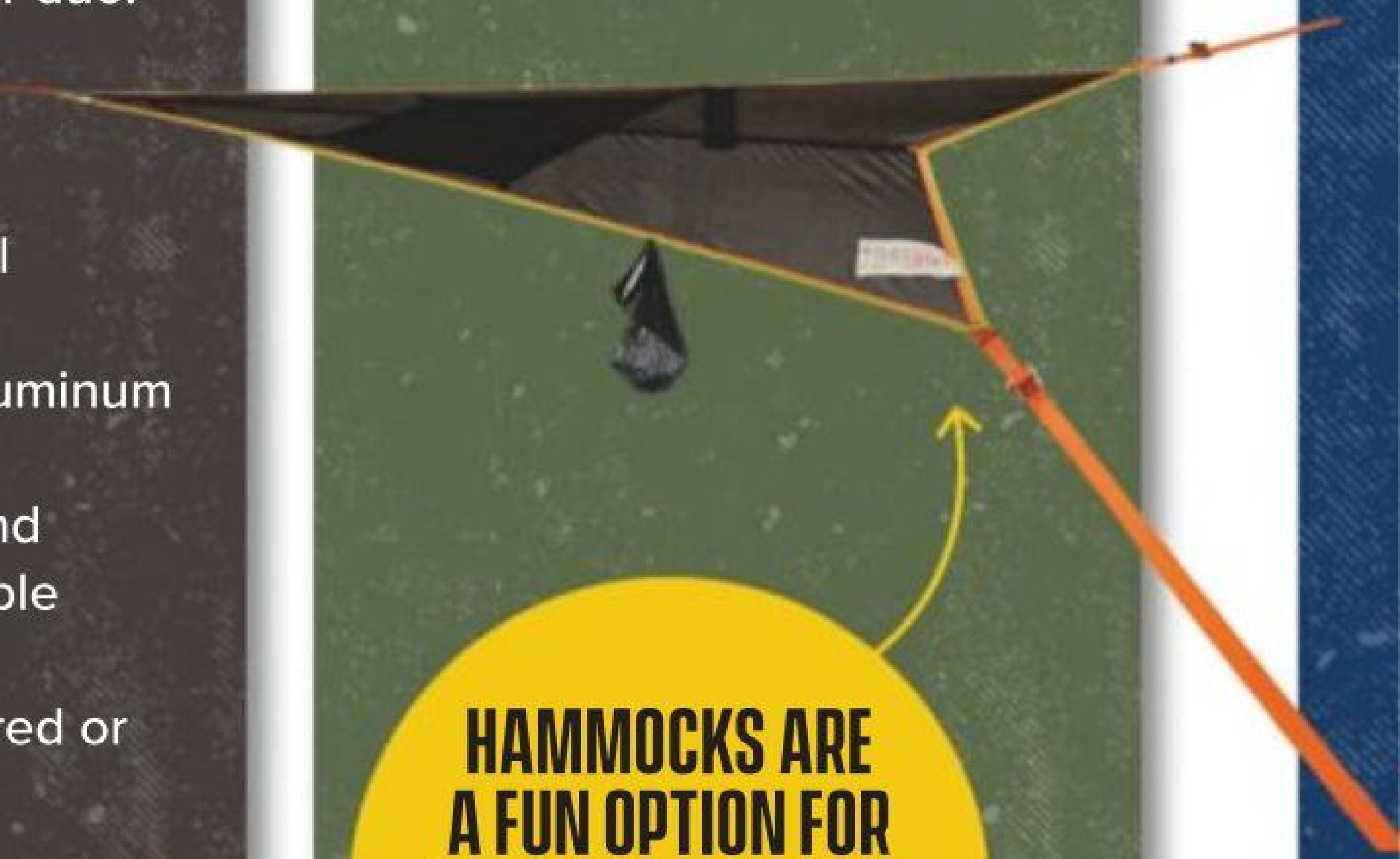
T-MINI 2 PERSON HAMMOCK

Sometimes you need to take a break and get some rest. What better way to do it than elevated above the perilous ground with the T-Mini Hammock? This temporary elevated shelter allows two people to enjoy the outdoors without any creepy crawlies or four-legged friends invading your camp. With a breathable fabric or mesh floor, underfloor storage, a tensioned antiroll strap system, and an incredible easy assembly utilizing three nearby trees, you'll be getting some rest in no time flat.

Specifications

- Holds two people comfortably
- 485-pound capacity
- Overall weight: 5.1 pounds
- Includes carrying bag
- Rated at 1,500 UV hours of direct sunlight

MSRP $189
tentsile.com



HAMMOCKS ARE A FUN OPTION FOR CAMPING ALL YEAR LONG, EVEN IN WINTER!

DAGGER OSMO 2P TENT

This tent takes on Mother Nature—and wins. Enjoy high-performance water repellency, reduced stretch when wet and a fabric shell that resists tearing like an absolute boss. The Osmo offers a roomy interior with two doors and two oversized vestibules, plus storage room for your packs and more. Setup is fast and simple with color-coded poles and webbing, so you'll have no mistakes even on your first pitching. Nightlight pockets, a waterproof storage tub and protected strut vents complete this home away from home.

Specifications

- High-performance Osmo poly-nylon outer shell
- Pre-bent anodized aluminum Featherlite poles
- Color-coded poles and webbing for easy setup
- Waterproof tub for gear storage
- Protected strut vents ensures ventilation even when raining

MSRP $530

nemoequipment.com

VISTA 2-PERSON TENT

The last thing anyone wants after a long day hiking is to spend time setting up a tent. That's not a problem with the Tenton Vista. Within seconds (yes, seconds) this tent will "pop" open and be ready for use. The tent features a full rainfly, taped seams, mesh for maximum air flow, and the comfort and peace of mind to enjoy a great night of sleep. Three color options, included stakes and a carrying bag round out this two-person home for any wilderness adventure.

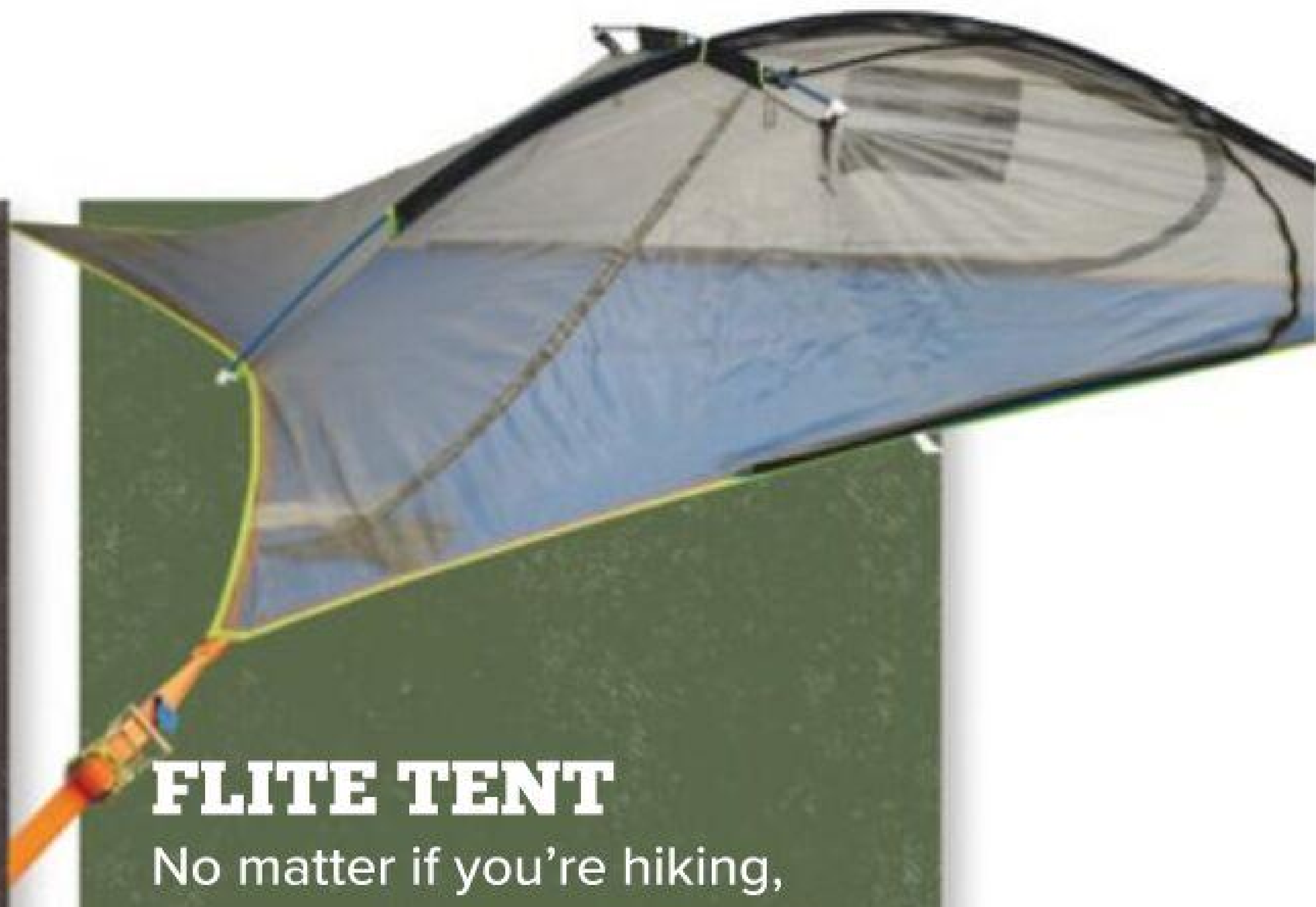
Specifications

- Sets up in seconds
- Full watertight rainfly
- Fits two cots comfortably
- Optimal air flow design
- Available in green, yellow or brown colors

MSRP $130

tentongear.com

THE QUICKER THE TENT SETS UP, THE FASTER YOU CAN GET TO THE FUN STUFF!



FLITE TENT

No matter if you're hiking, camping, hunting, fishing or just absorbing all that nature offers, you can sleep in comfort and security with the Flite two-person tent. This elevated shelter attaches to trees with an ingenious three-point anchoring system that creates a cushioned base to cradle the body for a great night's sleep. Its no-see-um insect mesh keeps pesky insects away from you, while its 70D polyester, 5000HH rainfly allows you and all your gear to stay dry. The Flite comes complete with all the needed setup accessories and a convenient carrying bag.

Specifications

- 5000 Hydrostatic waterproof rainfly
- Two doors for easy accessibility
- Inner storage compartments
- Anti-roll underfloor strap system
- Simple construction for one-person setup

MSRP $379

tentsile.com

JOURNEY DUO 2P TENT

The Journey Duo is one of the most practical two-person tents on the market today. Its low-profile design is excellent in gusty or steadily windy conditions. It features a large front porch design, ample space inside for people and gear, a large front door with mosquito netting, and a bathtub-style, highly durable ground sheet. Tough-as-nails 75D and 1090T polyester make up the main shell, while sturdy alloy poles give it its voluminous shape. The tent comes complete with a pocket kit for any on-the-spot repairs.

Specifications

- Low-profile design for windy conditions
- Taped seams
- 8 Alloy Y stakes
- Mosquito net ventilation panel
- Includes repair kit

MSRP $249
snugpakusa.com

COPPER SPUR HV UL2 TENT

Sporting the trifecta of maximum strength construction, a lightweight design, and easy-to-set-up hardware and poles, you'll enjoy three-season protection from the elements with peace of mind and sound sleep. This tent offers a large, dual-zipper door, ample storage options, low vents for optimal airflow and the perfect design for extra stability. Reflective guylines and webbing allow for enhanced night visibility, and all components fit easily in the included stuff sack for easy carrying.

Specifications

- Lightweight double ripstop nylon shell
- Dual-zippered doors for fast entry/exit
- TipLok tent buckle system provides multiple functions
- Multiple storage options for small gear
- Available in orange or olive-green colors

MSRP $530
bigagnes.com

SCORPION 2 IX TENT

No matter the time of year, this tent will protect you from Mother Nature's worst. Designed to be both hard-core when facing the rough outdoors and highly comfortable inside for sleeping, you'll get great sleep every night. The Scorpion features a unique, sturdy design, a full waterproof rainfly, taped seams, ample room for two, and even a front porch for gear storage. Utilizing lightweight aluminum poles and minimum accessories, this tent saves space and weight in your pack. Whether you're camping, hiking, hunting, fishing or mountaineering, this tent is for you!

Specifications

- Quick and easy setup
- Four-season protection
- No-see-um mesh for insect protection
- 5000 mm Hydrostatic head polyurethane flysheet
- 10 interior mesh pockets for small item storage

MSRP $499
sugpakusa.com

CHECKING OUT THE REGULATOR

The only camp knife inspired by a hammer

BY TIM STETZER

TECH SPECS

Overall Length	11.625 inches
Blade Length	6.25 inches
Blade Thickness	0.1875 inch
Steel	O1 Tool steel
Grind	Flat or Scandi
Weight	15.3 ounces without sheath
MSRP	$325
URL	*ltwright knives.com*

THE HANDLE DESIGN COMES FROM A TOOL L.T. WRIGHT FAVORED FOR MANY YEARS!

The Regulator made clean snap cuts through the branches on a tree limb that the author was processing.

I'VE WORKED WITH A LOT OF L.T. WRIGHT KNIVES OVER THE YEARS. IN FACT, I VE USED THEM SINCE THE DAYS WHEN L.T. WRIGHT KNIVES WAS JUST L.T. WRIGHT! THAT WAS EVEN BEFORE THE BLIND HORSE KNIVES ERA.

Most of the blades over the years have tended to range from compact to belt knife-sized, with the exception of some machetes. The latest introduction to the line is something a little different. The Regulator is a bigger tool designed for hard use, and it had some influence from another tool that L.T. had used for years.

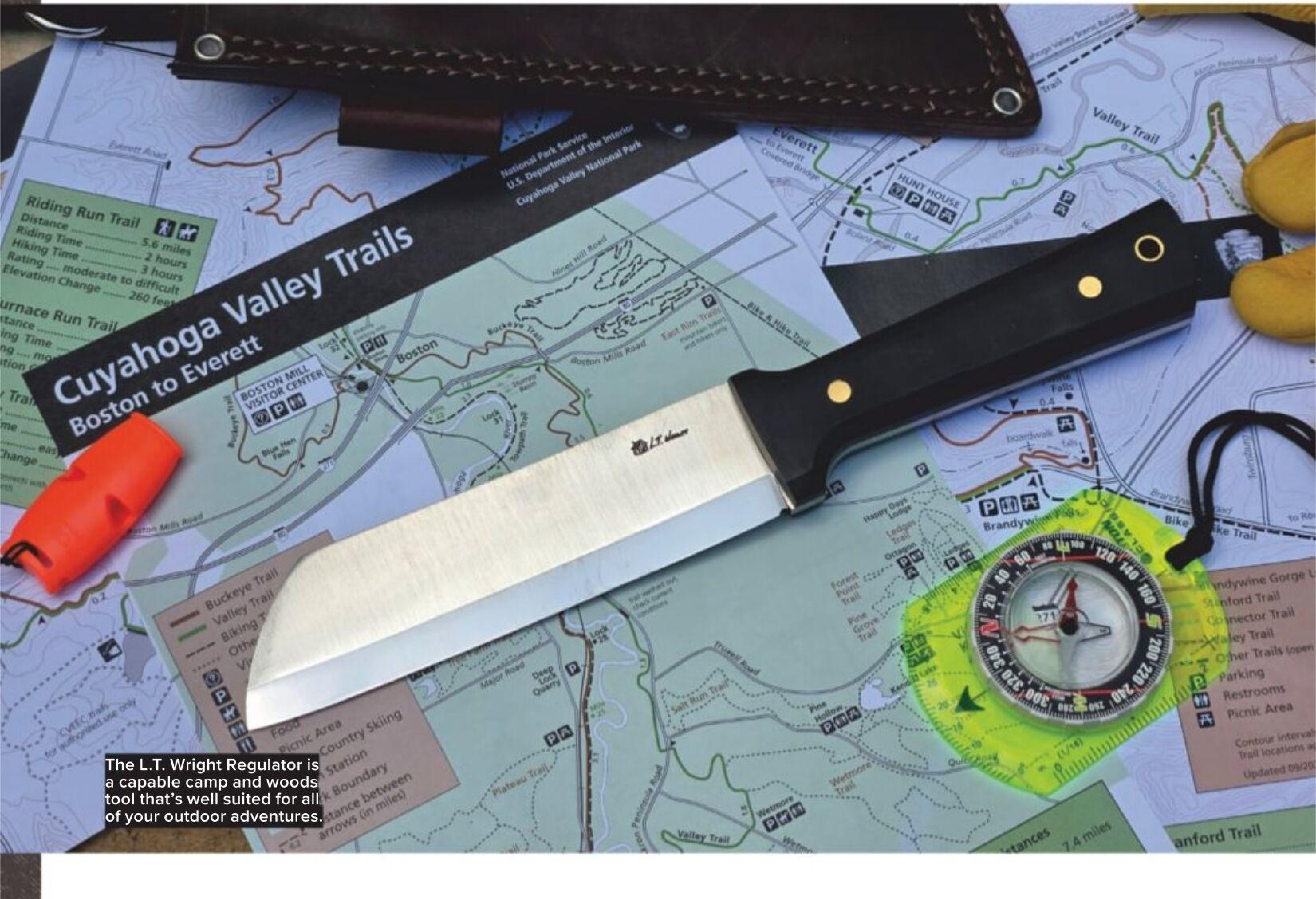
THE REGULATOR

The Regulator is designed as a hard-use camp knife. It's made to be a heavy-duty chopper and takes some design cues from the Bladesports competition cutting knives that L.T. and his crew have made and used.

It's just shy of a foot on overall length, and has a wide 6.25-inch-long blade. The blade shape, with its straight edge and downturned tip, reminds me of a Viking Seax. It's made from a hefty piece of 3/16-inch-thick O1 high-carbon tool steel, and comes with either a flat or Scandi grind. The Regulator is a full-tang design with a matte finish. It has a tasteful L.T. Wright logo engraved on one side of the blade, and a simple capital letter O, indicating the steel type, on the other side.

The handle scales are made from Black Diamond Richlite, and are screwed and epoxied in place. Richlite is a tough paper Micarta-like material used in cutting boards and countertops. A brass-lined lanyard hole is provided near the butt of the knife handle.

The Regulator's handle is hexagonal in cross-section, and a



The L.T. Wright Regulator is a capable camp and woods tool that's well suited for all of your outdoor adventures.

generous 5.25 inches long. And this is where things get interesting. The handle wasn't just a design that L.T. thought up and decided to try. It's based on the handle of a framing hammer that L.T. used extensively in his years as a carpenter, before he was a full-time knifemaker. It was a profile he was familiar with and knew to be comfortable for long hours of use. It made sense to translate this proven handle style to a knife designed for heavy camp use. It's not an exact reproduction of the hammer handle, but when you look at them side by side you can definitely see where the influence came from.

The Regulator comes with a quality leather JRE sheath. It's made in the bushcraft style, complete with a firesteel loop and a removable dangler. The Regulator weighs 15.3 ounces on its own and 20.5 ounces with the sheath.

On thicker pieces of wood, the Regulator bit deep and threw chips like an ax.

REGULATORS, MOUNT UP!

I didn't have any camping trips since I picked up my Regulator, but I did use it as my yard and fire pit tool over the summer. I had a big cherry branch come down in a storm a couple of months ago. It was probably 5 inches in diameter where it broke from the tree, and around 15 feet long. I was going to saw it up, but decided to use the Regulator to break it down instead.

I used snap cuts to limb the main branch of the smaller offshoots first. The long handle made this easy. I choked back on the handle, giving myself another couple of inches in length and let the weight of the blade do the bulk of the work. Even branches up to about 1 inch around cut cleanly with this method. Most cut through with one snap cut, and at most I used two.

The thicker portions of the branch required various degrees of chopping. This was where the handle of the Regulator really shone. That hexagonal profile proved to be very comfortable. There was plenty of handle space to position my hand to either apply a little more speed to the cut, or a little more power. The grip was fat enough that my hand didn't

WHEN YOU HIT THE TRAIL, YOU WANT TO HAVE WITH YOU TOOLS THAT WILL HOLD UP TO HARD USE AND THAT WON'T FAIL WHEN YOU NEED THEM.

cramp up during use—something my beat-up, arthritic hands tend to do. There were also no hot spots, or anything to cause blisters. Even though the handle is angular, the edges aren't sharp.

When it came to chopping, the Regulator bit into wood like an ax. This was partially due to the Scandi edge, but assisted by the blade shape and weight. I was impressed with the depth of the cuts and how it threw wood chips. The cuts were very smooth and clean as well.

CAMP CHORES

Once I had the big limb broken down, I experimented with the Regulator doing common camp-related tasks. I made a tent peg, which required some notching and whittling. Despite the Regulator's size, you could choke up on the grip and do finer work reasonably well. I think it would pair up nicely with a smaller knife, but it did handle some small knife tasks better than I expected.

After the tent peg, I trimmed a longer straight piece and cleaned up the ends to use as a walking stick and carved a baton. With baton in hand, I proceeded to split some pieces that I had already cut to length. The Regulator worked quite well for batoning. Its straight spine made for a good striking surface, and the Scandi blade acted as a wedge. The long handle let you get a good grip as well.

I was a little bit concerned about the

The Regulator comes with a high quality leather sheath from JRE Industries.

The Regulator is made from a hefty 3.16 inch thick piece of O1 tool steel.

The Regulator threw sparks from a ferrocerium rod like a flamethrower.

THIS IS A HEAVY-DUTY TOOL, BUT A TOOL THAT'S NIMBLE AND QUICK IN THE HAND!

Scandi edge after the batoning, especially since the one piece I split was gnarly and knotted. I gave it a close inspection when I was done, though, and everything looked good. It may have lost some of the initial sharpness, but there were no nicks or flat spots.

FIRE PREP AND MAINTENANCE

I used the Regulator to shave off some fatwood, and used the batoned kindling to start a fire in my fire pit. The sharp spine of the knife worked nicely as a scraper on the fatwood. I'm honestly not great at making feather sticks, and found it easier to use the spine of the knife to make nice, fine curls. The Regulator's spine also worked extremely well with a ferrocerium rod. It's a veritable flamethrower using one of my bigger ferro rods.

O1 is good steel, but it isn't a wonder steel. I'm OK with that though, because it's easy to maintain. O1 touches up easily using a loaded leather strop. I used my old JRE Strop Bat to clean up the edge on the Regulator after my general use over a month or so, and all of the chopping and batoning. It very quickly put a shaving-sharp edge back on the blade.

O1 is also a high-carbon tool steel and it does require maintenance. Like any carbon steel, it will rust if left unattended. I made sure to wipe down the blade and oil it when I was finished using it. Tool steels like O1 will develop a patina over time. Some guys are fanatical about polishing that off, but I'm OK with it. It shows that your knife is actually a user, and not just a safe queen.

REGULATOR WRAP-UP

After using the Regulator for a little over two months, I can say that I'm sold on its utility as a camp knife. I've used a lot of bigger blades over the years, including Bowies, Scandinavian Leukus and a number of modern camp knives. The Regulator performs at least as well as anything else I've used, and outperforms them in a couple areas. The relatively heavy blade and straight edge hit like a small ax. It really throws chips when chopping and the Scandi edge makes deep, clean cuts. For campsite and fire prep it works extremely well.

The handle is the other area where it really shines. It's a long handle that gives you plenty of room to grip, even with a glove on. You can choke up or back, depending on the task. The hexagonal hammer pattern handle proved very comfortable. I almost said surprisingly comfortable, but it shouldn't be a surprise. L.T. designed the handle based on a tool that he had spent many hours using. That experience shows in the design of the Regulator.

The Regulator has an MSRP of $325. It isn't inexpensive, but it's an extremely well made and well-thought-out tool. Like all L.T. Wright knives, the Regulator is made by the crew at their shop in Wintersville, Ohio.

THE POUT HOUSE

Named after an old shack found on L.T. Wright's family property, The Pout House is a group of devoted fans and supporters of the LTWK brand. Membership entitles you to sneak peeks of new knives coming from the shop, early access to some of those knives, as well as classes, monthly drawings and an invite to the annual Pout House Outing. You also receive exclusive access to an extensive and busy online forum where you can connect with other members, trade knives and more. Membership is $25 a year. More information can be found on the LTWK website: ltwrightknives.com.

Tim Stetzer lives in western Pennsylvania with his wife, two kids and too many cats. He has over two decades of law enforcement and criminal justice experience, and was an instructor at the County Police Academy for 15 years. Tim has written for various gun, knife and outdoors publications since 2006 and has designed, or helped design, a number of custom and production knives during that time.

KY Handcrafted
KY Handcrafted
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KY Handcrafted
KY Handcrafted
KY Handcrafted
CRAIG CAUDILL

THEY OFFER A WIDE RANGE OF BAGS AND POUCHES, PERFECT FOR USE ANYWHERE YOU GO!

KY Handcrafted offers a unique blend of waxed canvas, textiles and wooden bowls, all handcrafted in the heart of Appalachia.

DISCOVERING
KY HANDCRAFTED

Quality, tradition and excellence

BY CRAIG CAUDILL

IN A WORLD INCREASINGLY DOMINATED BY MASS-PRODUCED GOODS AND FLEETING TRENDS, THERE'S SOMETHING PROFOUNDLY REFRESHING ABOUT PRODUCTS CRAFTED WITH CARE, TRADITION AND ATTENTION TO DETAIL.

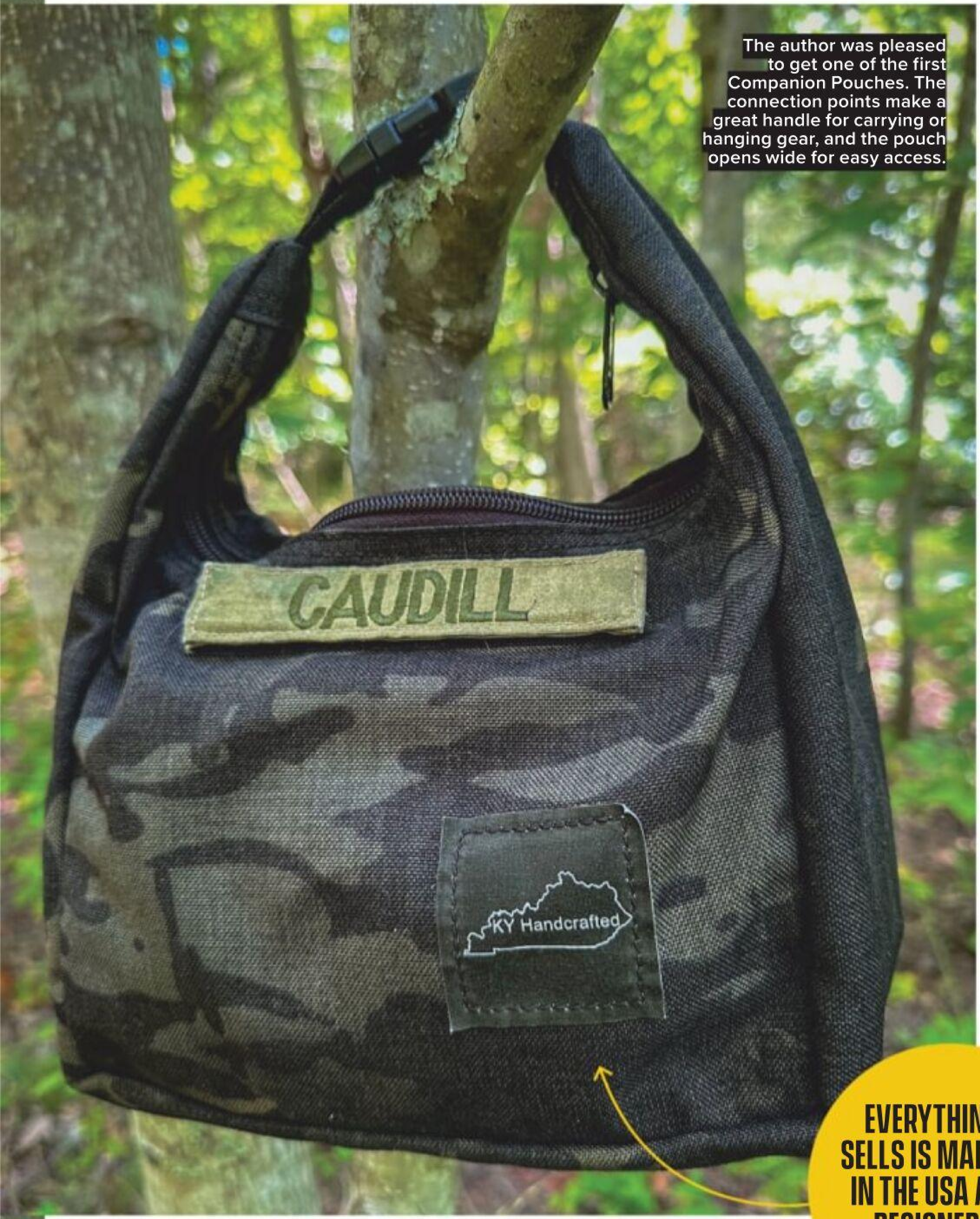
As someone who has dedicated his life to teaching others about self-reliance and the great outdoors, I deeply appreciate tools and products that serve their purpose and tell a story. I have enjoyed exploring the offerings of KY Handcrafted, a company that embodies these values to the fullest. I want to share my insights into this remarkable company and highlight some of its standout products that have impressed me in function and artistry, each bearing a unique personal touch.

NATURE RELIANCE

KY Handcrafted offers various waxed canvas pouches for different needs and uses.

COMMITMENT TO EXCELLENCE

KY Handcrafted, a Kentucky-based company, is known for its exceptional handcrafted goods that seamlessly blend traditional artistry with practical functionality. The heart and soul behind the company is Tracy Trimble, the owner, designer and dedicated craftsman who tirelessly perfects his craft. What truly sets KY Handcrafted apart is its unwavering commitment to creating products for everyday use and enjoyment. Tracy's expertise spans woodworking, textiles and waxed canvas goods, offering a diverse range of products, all made in the foothills of Appalachia near Frenchburg, Kentucky—a region with a rich history of



The author was pleased to get one of the first Companion Pouches. The connection points make a great handle for carrying or hanging gear, and the pouch opens wide for easy access.

EVERYTHING KY SELLS IS MADE HERE IN THE USA AND IS DESIGNED FOR HARD USE!

craftsmanship.

The company's philosophy is deeply rooted in a love for nature and the value of self-reliance. When consumers choose products from KY Handcrafted, they invest in top-quality goods and support a small local business that designs with purpose and experience. Tracy brings a wealth of practical knowledge to his work, having served as a search and rescue and fire service volunteer, an instructor at Nature Reliance School, and a lifelong lover of the outdoors. His extensive field experience informs the functional design of his soft goods, while his connection to the natural world is reflected in his beautifully crafted woodwork.

KY Handcrafted offers a diverse range of products, each meticulously designed and crafted to meet the highest standards. Its offerings, from outdoor gear to home goods, reflect a deep understanding of functionality and aesthetic appeal. Let's delve into some of the company's standout products that caught my attention.

ALL PURPOSE (AP) BAG PREMIUM

This particular piece from KY Handcrafted is, without a doubt, my favorite. I've used the waxed canvas AP bag, the predecessor to this model, almost daily for over a year. What I appreciate most about Tracy Trimble's approach is his commitment to continuous improvement. He actively seeks user feedback and refines his designs based on their experiences. The AP Bag, one of his standout creations, features an exceptionally robust design. It's constructed from a single piece of fabric that forms the bottom and sides, reinforced by straps that wrap around the base for unparalleled strength and durability. This design ensures the bag can handle heavy loads and withstand rigorous use, whether as a tool bag, range bag or to carry other substantial items. I

radtel
BAOFENG
UV9RPlus
Dual Band FM Transceiver
BAOFENG
UV9RPlus
Dual Band FM Transceiver

The Enhanced Communications Pouch is a newer addition to the product lineup.

use mine as a knife tool bag, storing all my bushcraft, survival and everyday knives. Another feature I find particularly useful is the hi-viz lining inside, which makes it much easier to locate and retrieve items, even in low-light conditions.

TOTE (CORDURA)

The KY Handcrafted Tote is the perfect blend of style and resilience, designed with the same meticulous attention to detail that defines all of Tracy Trimble's work. The carry handles are thoughtfully designed to envelop the entire bag, offering maximum support for all of your belongings. Every seam is carefully bound, ensuring enhanced protection and long-lasting durability. I keep a copy of each of my books in one of these and carry it everywhere to share with others who ask for them. This means it gets moved around and used a lot in my truck. Made from robust Cordura material, this tote combines elegance with strength, making it a reliable companion for any occasion. Whether heading to the store,

HAND-TURNED WOOD BOWLS

KY Handcrafted's expertise isn't limited to outdoor gear. Its home goods are equally impressive, showcasing the beauty of natural materials through skilled craftsmanship. These hand-turned wood bowls are true works of art. Each bowl is uniquely crafted, highlighting the wood's intricate grain patterns and natural hues. The smooth, polished finish enhances the wood's inherent natural beauty while providing a functional, food-safe container. The bowls come in various sizes, suitable for serving salads or fruits, or as decorative pieces. Their sturdy construction ensures longevity and can become cherished family heirlooms with proper care. He has video links for many of the products in his store where you can watch him craft the bowl from a log to a finished, beautiful piece. These hand-turned maple wood bowls exemplify KY Handcrafted's ability to blend functionality with artistry.

KY Handcrafted

The flat packs are great for organizing and storing gear. Multiple colors allow you to group similar gear in specific pouches for quick reference and use.

the office or the great outdoors, this tote elevates your carrying experience, seamlessly merging fashion with functionality.

ENHANCED COMMUNICATIONS POUCH (ECP)

The 1000D Cordura Enhanced Communications Pouch (ECP) is a testament to Tracy's practical experience with ham radio equipment and his dedication to craftsmanship. Designed to keep your communication tools organized and readily accessible, the ECP is a compact and rugged pouch that's an essential companion in any situation. Whether navigating the wilderness, out on the water or running errands with your family, this pouch ensures your gear stays protected and within reach. I've outfitted mine with two radios, a throw antenna, a paracord for hanging and several small antennas. The pouch also includes a separate inner compartment to securely store small connectors, preventing them from getting lost or accidentally dropping out.

These wooden bowls are great for home and cabin use. Man's best friend likes them, too.

FINAL THOUGHTS

KY Handcrafted stands out as a company that profoundly respects and embodies the principles of quality craftsmanship, sustainability and functional design. The brand's products are more than mere objects. They are tools and artifacts that enhance our connection to nature and our appreciation for traditional artistry.

Whether you're an outdoor enthusiast seeking reliable gear or someone who values handmade quality in everyday items, KY Handcrafted offers products that exceed expectations. By choosing the company's goods, you're investing in items that will serve you well and supporting a tradition of craftsmanship that honors the past while serving the present.

In a time where true quality can be hard to find, KY Handcrafted reminds us of the enduring value of products made with skill, care and a profound respect for nature and tradition. I highly recommend exploring KY's offerings and experiencing the excellence Tracy brings to every piece he creates.

You can find all of Tracy Trimble's practical and useful crafts, along with his YouTube channel links, at kyhandcrafted.com.

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Survival Guide
PRACTICAL ADVICE FOR THE SIMPLE LIFE

Editor-in-Chief
JIM COBB
Creative Director
SKYE BACK
Contributing Writers
H. CLAY AALDERS
DANA BENNER
REUBEN BOLIEU
CRAIG CAUDILL
MICHAEL D'ANGONA
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(Magazine & Digital)
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—
McClatchy Media
270 Sylvan Ave., 3rd Floor,
Englewood Cliffs, NJ 07632
(800) 749–7733
—
EVP, Content
AMANDA DAMERON
Chief Digital Officer
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BRIAN THEVENY, KERRY BERLET
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